

Source Water Assessment Report



Public Water Supply: ARKANSAS CITY, CITY OF

**Assessment Areas Include:
478, 479**



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Reports were generated with the Automated Source Water Assessment Tool (ASWAT). Assessments were completed online using ASWAT by hundreds of state employees, public water supply staff, and technical assistant providers throughout the State of Kansas.

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Report Description

Detailed Explanation of Entire Report:

The 1996 amendments to the Safe Drinking Water Act require each state to develop a Source Water Assessment Program (SWAP) and a Source Water Assessment (SWA) for each Public Water Supply (PWS) that treats and distributes raw source water. In Kansas there are 761 public water supplies that require SWAs. A SWA includes a delineation of the source water assessment area, an inventory of potential contaminant sources, and a susceptibility analysis.

A PWS can consist of one or more individual assessment areas that require different assessments. In general, an assessment area is delineated at a two-mile fixed radius for a groundwater well. A surface water intake assessment area is the upstream-drainage area (watershed), inside the state border. Additionally, an assessment area can consist of an individual well, group of wells, an individual surface water intake, or multiple surface water intakes.

After each assessment is completed a report is automatically generated using an Internet-based application called the Automated Source Water Assessment Tool (ASWAT). The individual assessment reports combine to form the entire SWA report for a PWS.

A map of each Assessment Area was also generated with ASWAT. However, for security reasons the maps are not included in this report. To obtain a copy of the map(s), please contact your local PWS.

All PWS reports will be available for viewing and downloading on KDHE's Watershed Management Section website(<http://www.kdhe.state.ks.us/nps>) in 2004.

ARKANSAS CITY, CITY OF Summary:

AA	Type	Diversion Id
478	Ground water multiple wells	009, 001, 002, 003, 004, 005, 006, 007, 008, 010
479	Surface water single intake	999

Public Water Supply: **ARKANSAS CITY, CITY OF**
Assessment Area: **478**
Diversion Id's: **009, 001, 002, 003, 004, 005, 006, 007, 008, 010**
Status: **Accepted**
Submit Date: **2003-07-10 15:34:43**

Executive Summary:

The Executive Summary gives the assessment area's Susceptibility Likelihood Score (SLS) for each contaminant of concern category.

SLS indicates which contaminant category is most likely to impact a given public water supply. Contaminants of concern for groundwater include microbiological, inorganic compounds, nitrates, synthetic organic compounds, pesticides, and volatile organic compounds. Contaminants of concern for surface water include microbiological, inorganic compounds, eutrophication – phosphorus, sedimentation, synthetic organic compounds, pesticides, and volatile organic compounds.

To determine the assessment area's susceptibility to contamination, a qualitative (semi-quantitative) screening level susceptibility analysis was designed that utilizes general assumptions and best professional judgement. It is a systematic procedure comprised of simple yes/no questions. Each question in the susceptibility analysis focuses on the presence or absence of potential pollution sources in the assessment area. SLS is most useful in helping the Public Water Supply (PWS) focus on water quality protection actions towards a contaminant category of concern. For example, if the SLS for microbiological contamination is high, relative to volatile organic compounds (VOC), water supply protection planners would conclude that the attention should be directed towards microbiological contaminant sources rather than VOC sources.

Executive Summary

Public Water Supply: **ARKANSAS CITY, CITY OF**
Assessment Area: **478**

Susceptibility Likelihood Scores for Assessment Area

Contaminant Category	A	B	B*	C	C*	D
Susceptibility Likelihood Score – SLS	47	49	40	56	48	59
SLS Range	Low	Low	Low	Mid	Low	Mid

A – Microbiological

B* – Nitrates

C* – Pesticides

B – Inorganic Compounds

C – Synthetic Organic Compounds

D – Volatile Organic Compounds

Susceptibility Likelihood Range

SLS Range	
0–50	Low Susceptibility
51–80	Moderate Susceptibility
81–100	High Susceptibility

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Potential Sources:

The Potential Sources section lists all the sites that have been identified as potential sources of contamination.

Potential sources of contamination may include land uses, industry, or businesses that could generate or store chemicals/substances that could potentially contaminate the water supply only if released into the environment. Both unregulated sites from business location databases and regulated sites from various KDHE databases were compiled. Additional sites could have been added by an evaluator through the assessment process to supplement the original data.

The 1987 Standard Industrial Classifications (SIC) were used to identify potential contaminate sites. The SIC system classifies establishments into industries on the basis of the primary activities of the establishment.

Each assessment area is delineated with 3 assessment zones. These zones can be used to get a general understanding of the potential influence sites have based on proximity to the water supply. Zone A is a 100-foot radius around a groundwater well and a 1000-foot radius around a surface water intake. Zone B is a 2000-foot radius around wells and a hydrological delineated buffer around the surface water sources. Zone C is a 2-mile radius around wells and the balance of the watershed for intakes. The potential sources listed in this section are sorted to show all the potential sources in Zone A first, Zone B second, and Zone C third.

Although a facility or business is identified in the study as a potential concern, it does not necessarily mean a release or spill has occurred. Contamination could only occur if certain chemical substances are released into the environment and filter into the water supply source.

The data for the potential sources of contamination was compiled from May through August in 2002. Some of the databases used were incomplete datasets that are continually being updated. Due to the incompleteness, inaccuracies, and new development, it is possible that sources of potential contamination that are in the assessment area are not included in the report. Inaccurate locations could also cause sources to show up in the assessment area that are not actually in the assessment. Additionally, duplication between the datasets could cause sites to show up multiple times in the assessment area.

Potential Sources

Public Water Supply: ARKANSAS CITY, CITY OF
Assessment Area: 478

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
163412	General Farm, Primarily Crop	191	C
162823	Veterinary Services, Specialties	742	C
162824	Veterinary Services, Specialties	742	C
163294	Animal Specialty Services	752	C
162929	Oil and Gas Field services	1389	C
163277	Oil and Gas Field services	1389	C
162827	Single-family Housing Construction	1521	C
163163	Single-family Housing Construction	1521	C
163166	Single-family Housing Construction	1521	C
163406	Single-family Housing Construction	1521	C
163516	Single-family Housing Construction	1521	C
162828	Nonresidential Construction	1542	C
162967	Nonresidential Construction	1542	C
163222	Nonresidential Construction	1542	C
163404	Nonresidential Construction	1542	C
163309	Meat Packing Plant Manufacturing	2011	C
163288	Frozen Specialties Manufacturing	2038	C
162822	Flour Mill and Other Food Grain Milling	2041	C

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
163180	Prepared Feeds For Animals and Fowls	2048	C
163261	Mobile Home Manufacturing	2451	C
163503	Mobile Home Manufacturing	2451	C
163097	Newspapers Publishing and Printing	2711	C
163028	Commercial Printing–Lithographic	2752	C
163305	Commercial Printing–Lithographic	2752	C
163043	Commercial Printing NEC	2759	C
162836	Ready–mix Concrete Plant	3273	C
163410	Screw Machine Products Manufacturing	3451	C
163411	Special Industries Machinery Manufacturing	3559	C
163492	Machinery, Except Electrical Manufacturing	3599	C
162879	Aircraft Engines and Parts Manufacturing	3724	C
163496	Travel trailers and Campers Manufacturing	3792	C
163187	Signs and Advertising Display Manufacturing	3993	C
163260	Local Trucking, without Storage	4212	C
162839	Farm Product Warehousing and Storage	4221	C
163169	Farm Product Warehousing and Storage	4221	C
162996	Pipeline Terminal	4789	C

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
162844	Refuse Systems	4953	C
163400	Refuse Systems	4953	C
163509	Refuse Systems	4953	C
163395	Farm and Garden Machinery	5083	C
163269	Scrap and Waste Materials	5093	C
163270	Scrap and Waste Materials	5093	C
162900	Gasoline Service Station	5541	C
162997	Gasoline Service Station	5541	C
163061	Gasoline Service Station	5541	C
163162	Gasoline Service Station	5541	C
163310	Gasoline Service Station	5541	C
163474	Gasoline Service Station	5541	C
163476	Gasoline Service Station	5541	C
163505	Recreational vehicle sales and repair	5561	C
162850	Mobile Home Park	6515	C
162894	Mobile Home Park	6515	C
163520	Sporting and Recreational Camps	7032	C
163057	Photofinishing Laboratory	7384	C
162858	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C
162912	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C
162921	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
163245	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C
163301	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C
163023	Auto Truck Repair Service	7538	C
163158	Auto Truck Repair Service	7538	C
163225	Auto Truck Repair Service	7538	C
163233	Auto Truck Repair Service	7538	C
163247	Auto Truck Repair Service	7538	C
163319	Auto Truck Repair Service	7538	C
163322	Auto Truck Repair Service	7538	C
163371	Auto Truck Repair Service	7538	C
162917	Car Wash	7542	C
162957	Repair Services, Nec	7699	C
163274	Repair Services, Nec	7699	C
163313	Repair Services, Nec	7699	C
162861	Racing, Including Track Operation	7948	C

Regulated Confined Animal Feeding Operations Potential Site Sources

Did Not Contain Any Of These Potential Site Sources

Regulated Hazardous Waste Potential Site Sources

Did Not Contain Any Of These Potential Site Sources

Regulated Leaking Storage Tank Potential Site Sources

Did Not Contain Any Of These Potential Site Sources

Regulated Identified Contaminated Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
7000153	ARKANSAS CITY DUMP SITE/OLD MILLIKEN REFINERY	C201800009	C
7000160	FMGP – ARKANSAS CITY	C201870044	C

Regulated Solid Waste Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
5000248	Midwest Waste Disposal, Inc.	0245–S	C
5000342	City of Arkansas City	0334–S	C
5000473	Munson Alsip	0456–S	C
5000544	L.G. Pike Construction Co.	0530–S	C

Regulated Waste Water Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
6000059	ATSF – ARKANSAS CITY	I–AR06–NO06	C

Regulated Waste Water Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
6000997	ARKANSAS CITY MWTP	M-AR06-IO01	C
6000998	ARKANSAS CITY MWTP	M-AR06-IO01	C

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Added Sources:

The Added Sources section lists all the sites that have been added as potential sources of contamination by an evaluator through the assessment process to supplement the original data.

The potential sources listed in this section are sorted to show the added potential sources in Zone A first, Zone B second, and Zone C third.

Although a facility or business was added as a potential concern, it does not necessarily mean a release or spill has occurred. Contamination could only occur if certain chemical substances are released into the environment and filter into the water supply source.

Added Sources

Public Water Supply: ARKANSAS CITY, CITY OF
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Added Potential Site Sources

Source No.	Source Name	SIC ID	Zone
Did Not Add Any Site Sources			

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Potential Contaminants Summary:

The Contaminants Summary shows the number of identified unregulated sources in the assessment area for each contaminant of concern category.

In order to obtain the number of sources for each category, a relationship was correlated between each Standard Industrial Classification (SIC) and the contaminant of concern categories. Each SIC was assessed and associated with contaminant categories. For example, if not managed properly, a car wash (SIC 7542) could potentially contaminate an intake because of inorganic compounds (IOC) and volatile organic compounds (VOC); thus, a car wash is associated with IOCs and VOCs.

A chart displays a count for each contaminant category. The sum for each category represents the total number of identified sources that have been associated with that particular contaminant category. However, the total number of identified sources does not include contaminants from the Added Sources. In our example, a car wash would be considered 2 sources of contamination. It would be a potential source of contamination for IOCs and for VOCs; thus, 1 would be added to the total number of sources in the VOC category and 1 would be added to the IOC category.

Potential Contaminants Summary

Public Water Supply: ARKANSAS CITY, CITY OF
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Number of Unregulated Site Sources Identified for each Contaminant Category

MicroBiological	Pesticides	IOC's	SOC's	VOC's	Nitrates
17	5	58	14	41	14

A – Microbiological

B* – Nitrates

C* – Pesticides

B – Inorganic Compounds

C – Synthetic Organic Compounds

D – Volatile Organic Compounds

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Potential Contaminants Listing:

The Potential Contaminants section lists the contaminant of concern category associated with each Standard Industrial Classification (SIC) found in an assessment area. A complete list of contaminant category codes are located at the bottom of this page.

The relationships defined between the Standard Industrial Classifications (SIC) and the contaminant of concern categories are displayed in a table format. Using our car wash example, the relationships can be better illustrated. A car wash could release IOC and VOC chemical substances. The connection is shown by indicating the SIC, 7542, and the associated contaminant categories, IOC (Category B) and VOC (Category D). However, the contaminants listed are not associated with any Added Sources.

The list is sorted by the SIC source description and it only shows unique SIC sources. For example, an assessment area can have 20 car washes in an assessment area, but the list is only going to show contaminant categories associated with car washes onetime. This is because all car washes have the same SIC and every car wash poses the same potential threat to water intakes.

A – Microbiological **B** – Inorganic Compounds **B1** – Eutrophication – Phosphorous
B2 – Sedimentation **B*** – Nitrates **C** – Synthetic Organic Compounds
C* – Pesticides **D** – Volatile Organic Compounds

Potential Contaminants Listing

Public Water Supply: ARKANSAS CITY, CITY OF
Assessment Area: 478

Unregulated Identified Site Sources and associated Potential Contaminant Category

SIC ID	SIC Source	Potential Contaminant	Contaminant Category
3724	Aircraft Engines and Parts Manufacturing	inorganics, VOCs	B
"	"	"	D
7538	Auto Truck Repair Service	Inorganics, VOCs	B
"	"	"	D
7542	Car Wash	Inorganics, VOCs	B
"	"	"	B1
"	"	"	B2
"	"	"	D
2041	Flour Mill and Other Food Grain Milling	BOD, TSS	A
"	"	"	B
2038	Frozen Specialties Manufacturing	BOD	A
5541	Gasoline Service Station	Inorganics, VOCs	B
"	"	"	D
4212	Local Trucking, without Storage	VOCs	D
3599	Machinery, Except Electrical Manufacturing	inorganics, VOCs	B
"	"	"	D
2011	Meat Packing Plant Manufacturing	BOD, pathogens, Oil and grease	A

Unregulated Identified Site Sources and associated Potential Contaminant Category.

SIC ID	SIC Source	Potential Contaminant	Contaminant Category
2011	Meat Packing Plant Manufacturing	BOD, pathogens, Oil and grease	B*
2451	Mobile Home Manufacturing	TSS, VOCs	B
"	"	"	D
6515	Mobile Home Park	Sanitary wastes, Fertilizers	A
"	"	"	B
"	"	"	B1
"	"	"	B*
1542	Nonresidential Construction	Sedimentation	B2
1389	Oil and Gas Field services	Oil, Salt Water	B
"	"	"	C
7384	Photofinishing Laboratory	NA	B
"	"	"	D
4789	Pipeline Terminal	Inorganics, VOCs	B
"	"	"	D
3273	Ready-mix Concrete Plant	Minerals and TSS	B
5093	Scrap and Waste Materials	Metals, TSS	B
3451	Screw Machine Products Manufacturing	inorganics, VOCs	B
"	"	"	D
3993	Signs and Advertising Display Manufacturing	inorganics, VOCs	B

Unregulated Identified Site Sources and associated Potential Contaminant Category.

SIC ID	SIC Source	Potential Contaminant	Contaminant Category
3993	Signs and Advertising Display Manufacturing	inorganics, VOCs	D
1521	Single-family Housing Construction	Oil, Paint, Pesticides, Fertilizers	A
"	"	"	B1
"	"	"	B2
"	"	"	B*
"	"	"	C
3559	Special Industries Machinery Manufacturing	inorganics, VOCs	B
"	"	"	D
7532	Top, Body, and Upholstery Repair Shops and Paint Shops	Inorganics, VOCs	B
"	"	"	D
3792	Travel trailers and Campers Manufacturing	inorganics, VOCs	B
"	"	"	D
742	Veterinary Services, Specialties	Sanitary, Inorganics TSS	A
"	"	"	B
752	Animal Specialty Services	Sanitary, fertilizers	A
"	"	"	B
"	"	"	B1
"	"	"	B2
"	"	"	B*

Unregulated Identified Site Sources and associated Potential Contaminant Category.

SIC ID	SIC Source	Potential Contaminant	Contaminant Category
2759	Commercial Printing NEC	Inorganics, VOCs, Semi volatiles	B
"	"	"	C
"	"	"	D
2752	Commercial Printing–Lithographic	Inorganics, VOCs, Semi volatiles	B
"	"	"	C
"	"	"	D
4221	Farm Product Warehousing and Storage	TSS, VOCs	B
"	"	"	D
5083	Farm and Garden Machinery	inorganics	B
191	General Farm, Primarily Crop	fertilizers, Pesticides	B
"	"	"	B1
"	"	"	B2
"	"	"	B*
"	"	"	C*
2711	Newspapers Publishing and Printing	Inorganics, VOCs, Semi volatiles	B
"	"	"	C
"	"	"	D
2048	Prepared Feeds For Animals and Fowls	Sanitary, Nitrates, phosphorous and pesticides	A
"	"	"	B

Unregulated Identified Site Sources and associated Potential Contaminant Category.

SIC ID	SIC Source	Potential Contaminant	Contaminant Category
2048	Prepared Feeds For Animals and Fowls	Sanitary, Nitrates, phosphorous and pesticides	B1
"	"	"	B2
"	"	"	B*
"	"	"	C*
7948	Racing, Including Track Operation		NA
5561	Recreational vehicle sales and repair	Inorganics	B
4953	Refuse Systems	ALL	A
"	"	"	B
"	"	"	B1
"	"	"	B2
"	"	"	B*
"	"	"	C
"	"	"	C*
"	"	"	D
7699	Repair Services, Nec	inorganics	B

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Protection Measures:

The Protection Measures section shows water quality protection measures for the Standard Industrial Classifications (SIC) identified in the assessment area.

Previous sections of this report are designed to show areas that Public Water Supplies (PWS) can focus on to improve the susceptibility of an assessment area. This section helps identify water quality protection measures that a PWS can use as guidance for implementing action for a potential contaminant site in the assessment area. It focuses on protection measures that can reduce the risk of contamination to the water supply.

This portion of the report only displays water quality protection measures for each type of SIC found in the assessment area. It does not display protection measures for each site in the assessment area because every SIC should have the same or similar water quality protection management practices. However, the protection measures listed are not associated with any Added Sources.

Protection Measures

Public Water Supply: **ARKANSAS CITY, CITY OF**
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Recommended Water Quality Protection Measures

SIC	SIC Source	Contaminant Source	Water Quality Protection Measure	Regulatory Authority
3724	Aircraft Engines and Parts Manufacturing	inorganics, VOCs	Manage wastes properly and treat process wastewater prior to discharge to a POTW or direct	40 CFR 464 and State or federal Storm water pollution prevention regulations
7538	Auto Truck Repair Service	Inorganics, VOCs	Discharge to POTW. Manage oil products and used oil so that it is not in contact with water	40 CFR 442 and
7542	Car Wash	Inorganics, VOCs	Install and maintain sediment and grease traps where appropriate	40 CFR 442
2041	Flour Mill and Other Food Grain Milling	BOD, TSS	Wastewater pretreatment and/or discharge to a POTW	40 CFR 122 and State or federal Storm water pollution prevention regulations
2038	Frozen Specialties Manufacturing	BOD	Wastewater pretreatment and/or discharge to a POTW	40 CFR 122 and State or federal Storm water pollution prevention regulations
5541	Gasoline Service Station	Inorganics, VOCs	Maintain area to minimize fuel contamination	NA

Recommended Water Quality Protection Measures

SIC	SIC Source	Contaminant Source	Water Quality Protection Measure	Regulatory Authority
4212	Local Trucking, without Storage	VOCs	Discharge to a POTW	State or federal Storm water pollution prevention regulations
3599	Machinery, Except Electrical Manufacturing	inorganics, VOCs	Manage wastes properly and treat process wastewater prior to discharge to a POTW or direct	State or federal Storm water pollution prevention regulations
2011	Meat Packing Plant Manufacturing	BOD, pathogens, Oil and grease	Wastewater pretreatment and/or discharge to a POTW	40CFR 432 and State or federal Storm water pollution prevention regulations
2451	Mobile Home Manufacturing	TSS, VOCs	Discharge of process waters to POTW. Minimize outdoor storage.	State or federal Storm water pollution prevention regulations
6515	Mobile Home Park	Sanitary wastes, Fertilizers	Discharge to POTW. Minimize use of lawn chemicals	KAR 28–5
1542	Nonresidential Construction	Sedimentation	Erosion and Sediment Control	KAR 28–16, KDHE

Recommended Water Quality Protection Measures

SIC	SIC Source	Contaminant Source	Water Quality Protection Measure	Regulatory Authority
1389	Oil and Gas Field services	Oil, Salt Water	Proper management of production wastes	KAR 28–41, 45, 40 CFR 435
7384	Photofinishing Laboratory	NA	Discharge to POTW. Recycle chemicals	CFR 40 459
4789	Pipeline Terminal	Inorganics, VOCs	Maintain secondary containment for fuel storage and fueling areas. Maintain and inspect. Effect repairs promptly	NA
3273	Ready–mix Concrete Plant	Minerals and TSS	Minimize outdoor storage and control storm water runoff.	State or federal Storm water pollution prevention regulations
5093	Scrap and Waste Materials	Metals, TSS	Minimize contact with storm water	State or federal Storm water pollution prevention regulations
3451	Screw Machine Products Manufacturing	inorganics, VOCs	Minimize outdoor storage and control storm water runoff. Pre–treat process wastewater prior to discharge to POTW	40 CFR 464 and State or federal Storm water pollution prevention regulations

Recommended Water Quality Protection Measures

SIC	SIC Source	Contaminant Source	Water Quality Protection Measure	Regulatory Authority
3993	Signs and Advertising Display Manufacturing	inorganics, VOCs	Manage wastes properly and treat process wastewater prior to discharge to a POTW or direct	40 CFR 459 and State or federal Storm water pollution prevention regulations
1521	Single-family Housing Construction	Oil, Paint, Pesticides, Fertilizers	Proper cleaning and disposal of household hazardous waste. Proper storage, application, and clean up of pesticides and fertilizers	KAR 28–48, KDHE, KDEM
3559	Special Industries Machinery Manufacturing	inorganics, VOCs	Manage wastes properly and treat process wastewater prior to discharge to a POTW or direct	State or federal Storm water pollution prevention regulations
7032	Sporting and Recreational Camps	sanitary, fertilizers, pesticides	Discharge to POTW. Minimize use of lawn chemicals	KAR 28–5
7532	Top, Body, and Upholstery Repair Shops and Paint Shops	Inorganics, VOCs	Discharge to POTW. Recycle where appropriate. Properly maintain oil product and waste. Manage paint and solvent wastes properly	NA
3792	Travel trailers and Campers Manufacturing	inorganics, VOCs	Manage wastes properly and treat process wastewater prior to discharge to a POTW or direct	State or federal Storm water pollution prevention regulations

Recommended Water Quality Protection Measures

SIC	SIC Source	Contaminant Source	Water Quality Protection Measure	Regulatory Authority
742	Veterinary Services, Specialties	Sanitary, Inorganics TSS	Discharge to POT	NA
752	Animal Specialty Services	Sanitary, fertilizers	Collect and treat wastes.	NA
2759	Commercial Printing NEC	Inorganics, VOCs, Semi volatiles	Recycle chemicals where possible. Discharge to POTW	40 CFR 459 and State or federal Storm water pollution prevention regulations
2752	Commercial Printing–Lithographic	Inorganics, VOCs, Semi volatiles	Recycle chemicals where possible. Discharge to POTW	40 CFR 459 and State or federal Storm water pollution prevention regulations
4221	Farm Product Warehousing and Storage	TSS, VOCs	Keep the area clean of grain. Use grease traps.	State or federal Storm water pollution prevention regulations
5083	Farm and Garden Machinery	inorganics	Discharge to POTW	NA

Recommended Water Quality Protection Measures

SIC	SIC Source	Contaminant Source	Water Quality Protection Measure	Regulatory Authority
191	General Farm, Primarily Crop	fertilizers, Pesticides	Maintain good erosion control practices and minimize the use of chemicals	NA
2711	Newspapers Publishing and Printing	Inorganics, VOCs, Semi volatiles	Recycle chemicals where possible. Discharge to POTW	40 CFR 459 and State or federal Storm water pollution prevention regulations
2048	Prepared Feeds For Animals and Fowls	Sanitary, Nitrates, phosphorous and pesticides	Maintain animal feeding areas and feed storage areas to minimize contact with storm water. Collect and treat process wastes.	40 CFR 412 and State or federal Storm water pollution prevention regulations
7948	Racing, Including Track Operation	NA	Discharge to POTW. Minimize use of lawn chemicals. Use good erosion control practices	NA
5561	Recreational vehicle sales and repair	Inorganics	Discharge to a POTW. Store oils and lubricants properly	Discharge to a POTW. Store oils and lubricants properly
4953	Refuse Systems	ALL	Store wastes properly in order to minimize contact with storm water.	Maintain the lagoon or storage vessel properly. Control storm water run on and runoff to minimize contamination of storm water

Recommended Water Quality Protection Measures

SIC	SIC Source	Contaminant Source	Water Quality Protection Measure	Regulatory Authority
7699	Repair Services, Nec	inorganics	Discharge to POTW	NA

Public Water Supply: **ARKANSAS CITY, CITY OF**
Assessment Area: **478**
Diversion Id's: **009, 001, 002, 003, 004, 005, 006, 007, 008, 010**
Status: **Accepted**
Submit Date: **2003-07-10 15:34:43**

Assessment Analysis:

The Assessment Analysis section displays the numbers assigned to each contaminant of concern category for each question in the susceptibility analysis.

This analysis is based on a decision tree framework consisting of a series of yes/no questions. These questions consider the proximity of contaminant sources to the water supply intake, the type of contaminant, and the application of pollution prevention or water quality protection practices to sources of contamination. As the evaluator moves through the analytical framework, susceptibility points are accumulated based on the presence of contaminant sources in the assessment area.

After all the questions have been answered, the SLS is calculated for each contaminant of concern category. The SLS is determined by counting the number of contamination risk factors found to occur in the delineated assessment area and applying a multiplier to this number. Because the number of contaminant category risk factors is not equal, the multiplier is used to establish a common scale for the SLS of each contaminant category.

Assessment Analysis

Public Water Supply: **ARKANSAS CITY, CITY OF**
Assessment Area: **478**

Ground Water Multiple Wells Analysis

A – Microbiological **B** – Inorganic Compounds
B* – Nitrates **C** – Synthetic Organic Compounds
C* – Pesticides **D** – Volatile Organic Compounds

No.	Question	Response	A	B	B*	C	C*	D
1	Is any well under the influence of surface water?	Yes	1	1	1	1	1	1
2	Do all PWS wells meet KS PWS water well construction standards?	Yes	0	0	0	0	0	0
3	Is any well less than 30 feet deep?	No	0	0	0	0	0	0
4	Is gravel pack within 20 feet of any well surface?	No	0	0	0	0	0	0
5	Does a PWS own or control all the areas around the wells?	Yes	0	0	0	0	0	0
6	Does Zone B consist entirely of native grass?	No	2	2	2	2	2	2
7	Is there a contaminated well in Zone B?	No	0	0	0	0	0	0
8	Is a class V UIC well present?	No	0	0	0	0	0	0
9	Are any commercial, industrial, or urban areas present in Zone B?	Yes	1	1	1	1	1	1
10	Does each industrial/commercial site and urban area have a water quality protection plan in place?	No	1	1	1	1	1	1
11	Are any non-farm home sites present in Zone B?	Yes	1	0	1	0	1	0
12	Do all the non-farm home sites have a water quality protection plan?	No	1	0	1	0	1	0
13	Are any farmsteads present in Zone B?	No	0	0	0	0	0	0
14	Do all farmsteads have a water quality protection plan?	Yes	0	0	0	0	0	0
15	Is there grazing livestock in Zone B?	No	0	0	0	0	0	0
16	Have all livestock producers implemented water quality protection measures?	Yes	0	0	0	0	0	0
17	Is there livestock confinement in Zone B?	No	0	0	0	0	0	0

No.	Question	Response	A	B	B*	C	C*	D
18	Is each confined animal feeding operation registered with KDHE?	Yes	0	0	0	0	0	0
19	Is there corn or grain sorghum production in Zone B?	No	0	0	0	0	0	0
20	Are corn/grain sorghum nutrient and pesticide management plans in use for each site?	Yes	0	0	0	0	0	0
21	Are any orchards present in Zone B?	No	0	0	0	0	0	0
22	Are orchard nutrient and pesticide management plans in use for each site?	Yes	0	0	0	0	0	0
23	Are there unsewered developments (concentrations of lagoons or septic systems) present in Zone B?	No	0	0	0	0	0	0
24	Is there a railroad or major highway in Zone B or C?	Yes	0	1	1	1	1	1
25	Is there oil production in Zone B or C?	Yes	0	1	0	1	0	1
26	Do coarse textured soils predominate Zones A, B and C?	Yes	1	1	1	1	1	1
27	Is an irrigation well located in Zone B or C?	No	0	0	0	0	0	0
28	Is a wastewater treatment facility in Zone B or C?	No	0	0	0	0	0	0
29	Is a solid waste landfill in Zone B or C?	Yes	1	1	1	1	1	1
30	Are there unplugged, abandoned water wells present in Zone C?	Yes	2	1	1	1	1	1
31	Are any commercial, industrial, or urban area present in Zone C?	Yes	1	1	1	1	1	1
32	Does each industrial/commercial site and urban area have a water quality protection plan in place?	No	1	1	1	1	1	1
33	Is there livestock confinement in Zone C?	No	0	0	0	0	0	0
34	Is each confined livestock facility registered with KDHE?	Yes	0	0	0	0	0	0
35	Do all the livestock producers have water quality protection measures in place?	Yes	0	0	0	0	0	0
36	Are cropland nutrient management plans in place?	Yes	0	0	0	0	0	0
37	Are cropland pesticide management plans in place?	No	0	0	0	0	1	0
38	Does a perennial stream flow into Zone C?	Yes	1	1	1	1	1	1
39	Are watershed water quality protection plans in place?	No	1	1	1	1	1	1

Public Water Supply: **ARKANSAS CITY, CITY OF**
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Status: **Accepted**
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Site Comments:

The Site Comments section lists all the comments that were added for the potential sources of contamination found in the assessment area.

Local comments and feedback from people that are familiar with the assessment area is an important aspect of the assessment. The comments greatly improve the assessment by adding detail to the sites that can be referenced for more information.

This local information may include comments on potential contamination threats (or lack there of), local water quality protection initiatives, etc. Adding comments are optional and are mainly focused on sources in areas that could have the greatest impact on water supply if a spill or release occurred in the environment. It is left to the discretion of the PWS and/or source water assessment committee to add comments.

Site Comments

Public Water Supply: ARKANSAS CITY, CITY OF
Assessment Area: 478

Comments for Unregulated Sites

Did Not Receive Any Comments

Comments for Regulated Confined Animal Feeding Operations Sites

Did Not Receive Any Comments

Comments for Regulated Hazardous Waste Sites

Did Not Receive Any Comments

Comments for Regulated Leaking Storage Tank Sites

Did Not Receive Any Comments

Comments for Regulated Identified Contaminated Sites

Did Not Receive Any Comments

Comments for Regulated Solid Waste Sites

Did Not Receive Any Comments

Comments for Regulated Waste Water Sites

Did Not Receive Any Comments

Public Water Supply: **ARKANSAS CITY, CITY OF**
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Status: **Accepted**
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Added Site Comments:

The Added Site Comments section lists the comments for why sites were added as a potential source of contamination found to the assessment area.

Added Site Comments

Public Water Supply: ARKANSAS CITY, CITY OF
Assessment Area: 478

Comments for Added Contaminant Sites

Added Contaminant Site Name	Site No.	Site Comments	Author
Did Not Receive Any Comments			

Public Water Supply: **ARKANSAS CITY, CITY OF**
Assessment Area: **478**
Diversion Id's: **009, 001, 002, 003, 004, 005, 006, 007, 008, 010**
Status: **Accepted**
Submit Date: **2003-07-10 15:34:43**

Analysis Question Comments:

The Analysis Question Comments section lists all the comments that were added during analysis portion of the assessment, in which a series of yes/no questions were asked.

Evaluators have the option to add comments to questions to clarify why a response was given or to give more details to a question. Local comments and feedback from people that are familiar with the assessment area is an important aspect of the assessment. The comments greatly improve the assessment by adding clarification and details that could not be identified with a simple yes or no response.

Analysis Question Comments

Public Water Supply: ARKANSAS CITY, CITY OF
Assessment Area: 478

Comments for Analysis Questions

Analysis Question	Question Comments	Author
Is any well under the influence of surface water?	KDHE has deemed all of our wells as under the influence.	Clay Randel
Are there unplugged, abandoned water wells present in Zone C?	unknown	Clay Randel
Are cropland nutrient management plans in place?	Unknown	Clay Randel

Public Water Supply: **ARKANSAS CITY, CITY OF**
Assessment Area: **479**
Diversion Id's: **999**
Status: **Accepted**
Submit Date: **2003-07-10 15:42:15**

Executive Summary:

The Executive Summary gives the assessment area's Susceptibility Likelihood Score (SLS) for each contaminant of concern category.

SLS indicates which contaminant category is most likely to impact a given public water supply. Contaminants of concern for groundwater include microbiological, inorganic compounds, nitrates, synthetic organic compounds, pesticides, and volatile organic compounds. Contaminants of concern for surface water include microbiological, inorganic compounds, eutrophication – phosphorus, sedimentation, synthetic organic compounds, pesticides, and volatile organic compounds.

To determine the assessment area's susceptibility to contamination, a qualitative (semi-quantitative) screening level susceptibility analysis was designed that utilizes general assumptions and best professional judgement. It is a systematic procedure comprised of simple yes/no questions. Each question in the susceptibility analysis focuses on the presence or absence of potential pollution sources in the assessment area. SLS is most useful in helping the Public Water Supply (PWS) focus on water quality protection actions towards a contaminant category of concern. For example, if the SLS for microbiological contamination is high, relative to volatile organic compounds (VOC), water supply protection planners would conclude that the attention should be directed towards microbiological contaminant sources rather than VOC sources.

Executive Summary

Public Water Supply: **ARKANSAS CITY, CITY OF**
Assessment Area: **479**

Susceptibility Likelihood Scores for Assessment Area

	A	B	B1	B2	C	C*	D
Susceptibility Likelihood Score – SLS	61	63	67	67	64	62	66
SLS Range	Mid	Mid	Mid	Mid	Mid	Mid	Mid

A – Microbiological

B2 – Sedimentation

C* – Pesticides

B – Inorganic Compounds

C – Synthetic Organic Compounds

D – Volatile Organic Compounds

B1 – Eutrophication – Phosphorous

Susceptibility Likelihood Range

SLS Range	
0–50	Low Susceptibility
51–80	Moderate Susceptibility
81–100	High Susceptibility

Public Water Supply: **ARKANSAS CITY, CITY OF**
Assessment Area: **479**
Diversion Id's: **999**
Status: **Accepted**
Submit Date: **2003-07-10 15:42:15**

Potential Sources:

The Potential Sources section lists all the sites that have been identified as potential sources of contamination.

Potential sources of contamination may include land uses, industry, or businesses that could generate or store chemicals/substances that could potentially contaminate the water supply only if released into the environment. Both unregulated sites from business location databases and regulated sites from various KDHE databases were compiled. Additional sites could have been added by an evaluator through the assessment process to supplement the original data.

The 1987 Standard Industrial Classifications (SIC) were used to identify potential contaminate sites. The SIC system classifies establishments into industries on the basis of the primary activities of the establishment.

Each assessment area is delineated with 3 assessment zones. These zones can be used to get a general understanding of the potential influence sites have based on proximity to the water supply. Zone A is a 100-foot radius around a groundwater well and a 1000-foot radius around a surface water intake. Zone B is a 2000-foot radius around wells and a hydrological delineated buffer around the surface water sources. Zone C is a 2-mile radius around wells and the balance of the watershed for intakes. The potential sources listed in this section are sorted to show all the potential sources in Zone A first, Zone B second, and Zone C third.

Although a facility or business is identified in the study as a potential concern, it does not necessarily mean a release or spill has occurred. Contamination could only occur if certain chemical substances are released into the environment and filter into the water supply source.

The data for the potential sources of contamination was compiled from May through August in 2002. Some of the databases used were incomplete datasets that are continually being updated. Due to the incompleteness, inaccuracies, and new development, it is possible that sources of potential contamination that are in the assessment area are not included in the report. Inaccurate locations could also cause sources to show up in the assessment area that are not actually in the assessment. Additionally, duplication between the datasets could cause sites to show up multiple times in the assessment area.

Potential Sources

Public Water Supply: **ARKANSAS CITY, CITY OF**
Assessment Area: **479**

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
159058	General Farm, Primarily Crop	191	B
165950	General Farm, Primarily Crop	191	B
170828	Cattle Farm	211	B
166438	Veterinary Services, Specialties	742	B
166439	Veterinary Services, Specialties	742	B
172835	Veterinary Services, Specialties	742	B
173251	Veterinary Services, Specialties	742	B
173252	Veterinary Services, Specialties	742	B
173253	Veterinary Services, Specialties	742	B
173497	Veterinary Services, Specialties	742	B
165906	Animal Specialty Services	752	B
165914	Animal Specialty Services	752	B
166465	Animal Specialty Services	752	B
166471	Animal Specialty Services	752	B
171526	Animal Specialty Services	752	B
172871	Animal Specialty Services	752	B
173320	Animal Specialty Services	752	B
173321	Animal Specialty Services	752	B

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
173378	Animal Specialty Services	752	B
173547	Animal Specialty Services	752	B
173549	Animal Specialty Services	752	B
173587	Animal Specialty Services	752	B
173579	Drilling Oil and Gas Wells	1381	B
163681	Oil and Gas Field services	1389	B
165810	Oil and Gas Field services	1389	B
165916	Oil and Gas Field services	1389	B
166579	Oil and Gas Field services	1389	B
166601	Oil and Gas Field services	1389	B
173018	Oil and Gas Field services	1389	B
173044	Oil and Gas Field services	1389	B
173588	Oil and Gas Field services	1389	B
163965	Rock Quarry	1429	B
163745	Single-family Housing Construction	1521	B
163983	Single-family Housing Construction	1521	B
165758	Single-family Housing Construction	1521	B
165870	Single-family Housing Construction	1521	B
166507	Single-family Housing Construction	1521	B
171547	Single-family Housing Construction	1521	B
171548	Single-family Housing Construction	1521	B
171581	Single-family Housing Construction	1521	B
172873	Single-family Housing Construction	1521	B

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
172874	Single-family Housing Construction	1521	B
172875	Single-family Housing Construction	1521	B
172953	Single-family Housing Construction	1521	B
172985	Single-family Housing Construction	1521	B
173049	Single-family Housing Construction	1521	B
173530	Single-family Housing Construction	1521	B
173569	Single-family Housing Construction	1521	B
189170	Single-family Housing Construction	1521	B
189181	Single-family Housing Construction	1521	B
189216	Single-family Housing Construction	1521	B
189225	Single-family Housing Construction	1521	B
163477	Nonresidential Construction	1542	B
163674	Nonresidential Construction	1542	B
166007	Nonresidential Construction	1542	B
166442	Nonresidential Construction	1542	B
166481	Nonresidential Construction	1542	B
172870	Nonresidential Construction	1542	B
172876	Nonresidential Construction	1542	B
172975	Nonresidential Construction	1542	B
173268	Nonresidential Construction	1542	B
173580	Nonresidential Construction	1542	B
189165	Nonresidential Construction	1542	B
163613	Highway and Street Construction	1611	B

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
163614	Highway and Street Construction	1611	B
165930	Highway and Street Construction	1611	B
165941	Highway and Street Construction	1611	B
166518	Highway and Street Construction	1611	B
171572	Highway and Street Construction	1611	B
173086	Highway and Street Construction	1611	B
166611	Meat Packing Plant Manufacturing	2011	B
166430	Ice Cream and Frozen Desserts Manufacturing	2024	B
173543	Bottled and Canned Soft Drinks Production	2086	B
163679	Wood Kitchen Cabinets Manufacturing	2434	B
163657	Newspapers Publishing and Printing	2711	B
166033	Newspapers Publishing and Printing	2711	B
173077	Newspapers Publishing and Printing	2711	B
163658	Commercial Printing–Lithographic	2752	B
166409	Commercial Printing–Lithographic	2752	B
172883	Commercial Printing–Lithographic	2752	B
173078	Commercial Printing–Lithographic	2752	B
164038	Commercial Printing NEC	2759	B
165961	Commercial Printing NEC	2759	B
166169	Commercial Printing NEC	2759	B
166195	Commercial Printing NEC	2759	B

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
166460	Commercial Printing NEC	2759	B
171606	Commercial Printing NEC	2759	B
172969	Commercial Printing NEC	2759	B
173301	Commercial Printing NEC	2759	B
173546	Commercial Printing NEC	2759	B
166469	Asphalt Paving Mixtures And Blocks Manufacturing	2951	B
173038	Plastics plumbing fixtures Manufacturing	3088	B
164036	Plastics products Manufacturing	3089	B
164039	Plastics products Manufacturing	3089	B
166425	Plastics products Manufacturing	3089	B
172884	Plastics products Manufacturing	3089	B
163661	Plating and Polishing Manufacturing	3471	B
163660	Lawn and Garden Equipment Manufacturing	3524	B
164009	Machinery, Except Electrical Manufacturing	3599	B
171549	Machinery, Except Electrical Manufacturing	3599	B
173536	Cathode Ray Television Picture Tubes Manufacturing	3672	B
163777	Aircraft Equipment Manufacturing	3728	B

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
164034	Aircraft Equipment Manufacturing	3728	B
171550	Aircraft Equipment Manufacturing	3728	B
166488	Railroad Equipment Manufacturing	3743	B
173540	Surgical and Medical Instruments Manufacturing	3841	B
171527	Farm Product Warehousing and Storage	4221	B
172887	Farm Product Warehousing and Storage	4221	B
172888	Farm Product Warehousing and Storage	4221	B
172957	Farm Product Warehousing and Storage	4221	B
173238	Farm Product Warehousing and Storage	4221	B
173575	Farm Product Warehousing and Storage	4221	B
173589	Farm Product Warehousing and Storage	4221	B
172808	Farm and Garden Machinery	5083	B
163828	Scrap and Waste Materials	5093	B
166603	Scrap and Waste Materials	5093	B
166140	Gasoline Service Station	5541	B
166152	Gasoline Service Station	5541	B
172897	Gasoline Service Station	5541	B
172963	Gasoline Service Station	5541	B
172964	Gasoline Service Station	5541	B
163972	Recreational vehicle sales and repair	5561	B
189159	Recreational vehicle sales and repair	5561	B
166161	Mobile Home Park	6515	B

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
171940	Mobile Home Park	6515	B
173375	Mobile Home Park	6515	B
163978	Sporting and Recreational Camps	7032	B
168858	Sporting and Recreational Camps	7032	B
166150	Photofinishing Laboratory	7384	B
173480	Photofinishing Laboratory	7384	B
166398	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	B
166607	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	B
173023	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	B
173024	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	B
173278	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	B
173422	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	B
173492	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	B
173526	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	B
173568	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	B

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
163664	Auto Truck Repair Service	7538	B
163677	Auto Truck Repair Service	7538	B
163829	Auto Truck Repair Service	7538	B
163948	Auto Truck Repair Service	7538	B
163973	Auto Truck Repair Service	7538	B
163974	Auto Truck Repair Service	7538	B
165988	Auto Truck Repair Service	7538	B
166106	Auto Truck Repair Service	7538	B
166144	Auto Truck Repair Service	7538	B
166170	Auto Truck Repair Service	7538	B
166262	Auto Truck Repair Service	7538	B
166318	Auto Truck Repair Service	7538	B
166370	Auto Truck Repair Service	7538	B
166371	Auto Truck Repair Service	7538	B
166402	Auto Truck Repair Service	7538	B
166435	Auto Truck Repair Service	7538	B
166451	Auto Truck Repair Service	7538	B
166534	Auto Truck Repair Service	7538	B
171529	Auto Truck Repair Service	7538	B
171904	Auto Truck Repair Service	7538	B
172916	Auto Truck Repair Service	7538	B
172956	Auto Truck Repair Service	7538	B
172968	Auto Truck Repair Service	7538	B

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
172970	Auto Truck Repair Service	7538	B
173022	Auto Truck Repair Service	7538	B
173185	Auto Truck Repair Service	7538	B
173451	Auto Truck Repair Service	7538	B
173502	Auto Truck Repair Service	7538	B
173545	Auto Truck Repair Service	7538	B
173570	Auto Truck Repair Service	7538	B
173402	Car Wash	7542	B
163854	Repair Services, Nec	7699	B
166461	Repair Services, Nec	7699	B
166498	Repair Services, Nec	7699	B
168857	Repair Services, Nec	7699	B
172917	Repair Services, Nec	7699	B
172951	Repair Services, Nec	7699	B
173292	Repair Services, Nec	7699	B
166156	Golf Course	7992	B
163525	General Farm, Primarily Crop	191	C
189229	General Farm, Primarily Crop	191	C
159056	Cattle Farm	211	C
163546	Cattle Farm	211	C
171945	Dairy Farms	241	C
162307	Veterinary Services, Specialties	742	C
162308	Veterinary Services, Specialties	742	C

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
162309	Veterinary Services, Specialties	742	C
162343	Veterinary Services, Specialties	742	C
162351	Veterinary Services, Specialties	742	C
162427	Veterinary Services, Specialties	742	C
162428	Veterinary Services, Specialties	742	C
162429	Veterinary Services, Specialties	742	C
162823	Veterinary Services, Specialties	742	C
162824	Veterinary Services, Specialties	742	C
163398	Veterinary Services, Specialties	742	C
163399	Veterinary Services, Specialties	742	C
163426	Veterinary Services, Specialties	742	C
163447	Veterinary Services, Specialties	742	C
163927	Veterinary Services, Specialties	742	C
163928	Veterinary Services, Specialties	742	C
163929	Veterinary Services, Specialties	742	C
163930	Veterinary Services, Specialties	742	C
163931	Veterinary Services, Specialties	742	C
164184	Veterinary Services, Specialties	742	C
165779	Veterinary Services, Specialties	742	C
165890	Veterinary Services, Specialties	742	C
166564	Veterinary Services, Specialties	742	C
168853	Veterinary Services, Specialties	742	C
170809	Veterinary Services, Specialties	742	C

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
171660	Veterinary Services, Specialties	742	C
179004	Veterinary Services, Specialties	742	C
189154	Veterinary Services, Specialties	742	C
162240	Animal Specialty Services	752	C
162305	Animal Specialty Services	752	C
162310	Animal Specialty Services	752	C
162519	Animal Specialty Services	752	C
163966	Animal Specialty Services	752	C
171579	Animal Specialty Services	752	C
171947	Animal Specialty Services	752	C
171992	Animal Specialty Services	752	C
162929	Oil and Gas Field services	1389	C
164164	Oil and Gas Field services	1389	C
165811	Oil and Gas Field services	1389	C
166226	Oil and Gas Field services	1389	C
166361	Oil and Gas Field services	1389	C
166362	Oil and Gas Field services	1389	C
166366	Oil and Gas Field services	1389	C
171950	Oil and Gas Field services	1389	C
173519	Oil and Gas Field services	1389	C
159057	Single-family Housing Construction	1521	C
162241	Single-family Housing Construction	1521	C
162272	Single-family Housing Construction	1521	C

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
162294	Single-family Housing Construction	1521	C
162372	Single-family Housing Construction	1521	C
162498	Single-family Housing Construction	1521	C
162827	Single-family Housing Construction	1521	C
163163	Single-family Housing Construction	1521	C
163166	Single-family Housing Construction	1521	C
163489	Single-family Housing Construction	1521	C
163516	Single-family Housing Construction	1521	C
163786	Single-family Housing Construction	1521	C
163836	Single-family Housing Construction	1521	C
163954	Single-family Housing Construction	1521	C
163958	Single-family Housing Construction	1521	C
163959	Single-family Housing Construction	1521	C
163961	Single-family Housing Construction	1521	C
164015	Single-family Housing Construction	1521	C
164165	Single-family Housing Construction	1521	C
165605	Single-family Housing Construction	1521	C
165641	Single-family Housing Construction	1521	C
165761	Single-family Housing Construction	1521	C
165794	Single-family Housing Construction	1521	C
165812	Single-family Housing Construction	1521	C
165813	Single-family Housing Construction	1521	C
165874	Single-family Housing Construction	1521	C

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
165884	Single-family Housing Construction	1521	C
166253	Single-family Housing Construction	1521	C
166346	Single-family Housing Construction	1521	C
166554	Single-family Housing Construction	1521	C
166584	Single-family Housing Construction	1521	C
168829	Single-family Housing Construction	1521	C
170811	Single-family Housing Construction	1521	C
170812	Single-family Housing Construction	1521	C
178745	Single-family Housing Construction	1521	C
179012	Single-family Housing Construction	1521	C
179015	Single-family Housing Construction	1521	C
179193	Single-family Housing Construction	1521	C
179218	Single-family Housing Construction	1521	C
189235	Single-family Housing Construction	1521	C
189245	Single-family Housing Construction	1521	C
162295	Nonresidential Construction	1542	C
162323	Nonresidential Construction	1542	C
162326	Nonresidential Construction	1542	C
162392	Nonresidential Construction	1542	C
162828	Nonresidential Construction	1542	C
162829	Nonresidential Construction	1542	C
162967	Nonresidential Construction	1542	C
163845	Nonresidential Construction	1542	C

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
165875	Nonresidential Construction	1542	C
165887	Nonresidential Construction	1542	C
166223	Nonresidential Construction	1542	C
171941	Nonresidential Construction	1542	C
173380	Nonresidential Construction	1542	C
173528	Nonresidential Construction	1542	C
179200	Nonresidential Construction	1542	C
164143	Highway and Street Construction	1611	C
171893	Highway and Street Construction	1611	C
171951	Highway and Street Construction	1611	C
172804	Meat Packing Plant Manufacturing	2011	C
162822	Flour Mill and Other Food Grain Milling	2041	C
172828	Flour Mill and Other Food Grain Milling	2041	C
163180	Prepared Feeds For Animals and Fowls	2048	C
163503	Mobile Home Manufacturing	2451	C
162306	Prefabricated Wood Buildings Manufacturing	2452	C
163976	Prefabricated Wood Buildings Manufacturing	2452	C
171994	Prefabricated Wood Buildings Manufacturing	2452	C

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
178776	Prefabricated Wood Buildings Manufacturing	2452	C
179013	Prefabricated Wood Buildings Manufacturing	2452	C
162328	Mattresses and Bedsprings Manufacturing	2515	C
162479	Newspapers Publishing and Printing	2711	C
163097	Newspapers Publishing and Printing	2711	C
171662	Newspapers Publishing and Printing	2711	C
178251	Newspapers Publishing and Printing	2711	C
162396	Commercial Printing–Lithographic	2752	C
163028	Commercial Printing–Lithographic	2752	C
165851	Commercial Printing–Lithographic	2752	C
171895	Commercial Printing–Lithographic	2752	C
159062	Commercial Printing NEC	2759	C
162426	Commercial Printing NEC	2759	C
162431	Commercial Printing NEC	2759	C
162500	Commercial Printing NEC	2759	C
163043	Commercial Printing NEC	2759	C
164014	Commercial Printing NEC	2759	C
165856	Commercial Printing NEC	2759	C
166115	Commercial Printing NEC	2759	C
172273	Commercial Printing NEC	2759	C

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
166538	Petroleum Refining	2911	C
162836	Ready-mix Concrete Plant	3273	C
166616	Metal Barrels, Drums, and Pails Manufacturing	3412	C
173503	Metal Barrels, Drums, and Pails Manufacturing	3412	C
171585	Sheet Metal Work Manufacturing	3444	C
166525	Metal Coating and Allied Services Manufacturing	3479	C
165816	Fabricated Metal Products Manufacturing	3499	C
164180	Farm Machinery and Equipment	3523	C
162242	Refrigeration and Heating Equipment Manufacturing	3585	C
163486	Machinery, Except Electrical Manufacturing	3599	C
163492	Machinery, Except Electrical Manufacturing	3599	C
165726	Machinery, Except Electrical Manufacturing	3599	C
166343	Machinery, Except Electrical Manufacturing	3599	C
170161	Machinery, Except Electrical Manufacturing	3599	C

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
170616	Machinery, Except Electrical Manufacturing	3599	C
162837	Engine Electrical Equipment Manufacturing	3694	C
162530	Aircraft—manufacturing	3721	C
166543	Aircraft—manufacturing	3721	C
171993	Aircraft—manufacturing	3721	C
162879	Aircraft Engines and Parts Manufacturing	3724	C
178156	Aircraft Equipment Manufacturing	3728	C
189222	Aircraft Equipment Manufacturing	3728	C
163496	Travel trailers and Campers Manufacturing	3792	C
168863	Signs and Advertising Display Manufacturing	3993	C
171653	Signs and Advertising Display Manufacturing	3993	C
162324	Manufacturing Industries, nec	3999	C
165753	Local Trucking, without Storage	4212	C
170814	Local Trucking, without Storage	4212	C
162839	Farm Product Warehousing and Storage	4221	C
163169	Farm Product Warehousing and Storage	4221	C
163527	Farm Product Warehousing and Storage	4221	C

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
164181	Farm Product Warehousing and Storage	4221	C
172163	Farm Product Warehousing and Storage	4221	C
172274	Farm Product Warehousing and Storage	4221	C
172806	Farm Product Warehousing and Storage	4221	C
173559	Farm Product Warehousing and Storage	4221	C
162345	Pipeline Terminal	4789	C
162996	Pipeline Terminal	4789	C
162844	Refuse Systems	4953	C
163509	Refuse Systems	4953	C
164007	Refuse Systems	4953	C
171646	Refuse Systems	4953	C
163457	Recreational vehicle sales and repair	5012	C
164148	Recreational vehicle sales and repair	5012	C
178761	Recreational vehicle sales and repair	5012	C
160165	Farm and Garden Machinery	5083	C
162245	Farm and Garden Machinery	5083	C
166581	Farm and Garden Machinery	5083	C
170816	Farm and Garden Machinery	5083	C
172836	Farm and Garden Machinery	5083	C
173522	Farm and Garden Machinery	5083	C
173524	Farm and Garden Machinery	5083	C
178773	Farm and Garden Machinery	5083	C
166620	Scrap and Waste Materials	5093	C

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
170171	Scrap and Waste Materials	5093	C
162362	Gasoline Service Station	5541	C
162900	Gasoline Service Station	5541	C
162997	Gasoline Service Station	5541	C
163061	Gasoline Service Station	5541	C
163474	Gasoline Service Station	5541	C
163757	Gasoline Service Station	5541	C
163804	Gasoline Service Station	5541	C
165785	Gasoline Service Station	5541	C
166296	Gasoline Service Station	5541	C
166567	Gasoline Service Station	5541	C
170817	Gasoline Service Station	5541	C
173249	Gasoline Service Station	5541	C
162249	Recreational vehicle sales and repair	5561	C
162336	Recreational vehicle sales and repair	5561	C
162353	Recreational vehicle sales and repair	5561	C
163505	Recreational vehicle sales and repair	5561	C
162471	Mobile Home Park	6515	C
162850	Mobile Home Park	6515	C
162894	Mobile Home Park	6515	C
163802	Mobile Home Park	6515	C
163870	Mobile Home Park	6515	C
165828	Mobile Home Park	6515	C

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
166335	Mobile Home Park	6515	C
166367	Mobile Home Park	6515	C
166485	Mobile Home Park	6515	C
166580	Mobile Home Park	6515	C
166582	Mobile Home Park	6515	C
178420	Mobile Home Park	6515	C
178421	Mobile Home Park	6515	C
189249	Mobile Home Park	6515	C
162348	Sporting and Recreational Camps	7032	C
163520	Sporting and Recreational Camps	7032	C
163985	Sporting and Recreational Camps	7032	C
166615	Sporting and Recreational Camps	7032	C
168827	Sporting and Recreational Camps	7032	C
168862	Sporting and Recreational Camps	7032	C
163487	Recreational Vehicle Parks and Campsites	7033	C
163057	Photofinishing Laboratory	7384	C
162293	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C
162858	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C
162912	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
162921	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C
163765	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C
163810	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C
163999	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C
164023	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C
165861	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C
166353	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C
168851	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C
170158	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C
171609	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C
171961	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C
178759	Top, Body, and Upholstery Repair Shops and Paint Shops	7532	C

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
159048	Auto Truck Repair Service	7538	C
162358	Auto Truck Repair Service	7538	C
162411	Auto Truck Repair Service	7538	C
162435	Auto Truck Repair Service	7538	C
162453	Auto Truck Repair Service	7538	C
163023	Auto Truck Repair Service	7538	C
163158	Auto Truck Repair Service	7538	C
163371	Auto Truck Repair Service	7538	C
163464	Auto Truck Repair Service	7538	C
163806	Auto Truck Repair Service	7538	C
163993	Auto Truck Repair Service	7538	C
163994	Auto Truck Repair Service	7538	C
164159	Auto Truck Repair Service	7538	C
165739	Auto Truck Repair Service	7538	C
165833	Auto Truck Repair Service	7538	C
165860	Auto Truck Repair Service	7538	C
165862	Auto Truck Repair Service	7538	C
166340	Auto Truck Repair Service	7538	C
166565	Auto Truck Repair Service	7538	C
166623	Auto Truck Repair Service	7538	C
168837	Auto Truck Repair Service	7538	C
168838	Auto Truck Repair Service	7538	C
170159	Auto Truck Repair Service	7538	C

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
171555	Auto Truck Repair Service	7538	C
171644	Auto Truck Repair Service	7538	C
171905	Auto Truck Repair Service	7538	C
171962	Auto Truck Repair Service	7538	C
171963	Auto Truck Repair Service	7538	C
172816	Auto Truck Repair Service	7538	C
179034	Auto Truck Repair Service	7538	C
179201	Auto Truck Repair Service	7538	C
162917	Car Wash	7542	C
166293	Car Wash	7542	C
178753	Car Wash	7542	C
162255	Repair Services, Nec	7699	C
162318	Repair Services, Nec	7699	C
162957	Repair Services, Nec	7699	C
163331	Repair Services, Nec	7699	C
163774	Repair Services, Nec	7699	C
163940	Repair Services, Nec	7699	C
164011	Repair Services, Nec	7699	C
166248	Repair Services, Nec	7699	C
166527	Repair Services, Nec	7699	C
166577	Repair Services, Nec	7699	C
171533	Repair Services, Nec	7699	C
171578	Repair Services, Nec	7699	C

Unregulated Potential Site Sources

Source No.	SIC Description	SIC ID	Zone
171610	Repair Services, Nec	7699	C
171926	Repair Services, Nec	7699	C
171979	Repair Services, Nec	7699	C
179204	Repair Services, Nec	7699	C
179209	Repair Services, Nec	7699	C
189192	Repair Services, Nec	7699	C
162861	Racing, Including Track Operation	7948	C
165836	Racing, Including Track Operation	7948	C
162256	Golf Course	7992	C
163921	Golf Course	7992	C

Regulated Confined Animal Feeding Operations Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
2000210	Esau, Elbert	A-WABU-S013	B
2000289	Worrell, David	A-WABU-BA26	B
2000390	Qsi Jersey Farm	A-WACL-M005	B
2000400	Regier Farms	A-WAMN-BA03	B
2000443	Holt, Glen	A-WACL-SA01	B
2000598	Southern Kansas Pork Producers Buying Station	A-WACL-SA05	B
2000639	Schueneman, Paul	A-WACL-BA07	B

Regulated Confined Animal Feeding Operations Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
2000774	Gaines Farm	A-WABU-S038	B
2000905	Fagan Living Trust	A-WABU-BA18	B
2000912	Mosiman, Bret	A-WABU-BA20	B
2000944	Teneyck Angus Farm	A-WAHV-BA05	B
2000954	Penner, Walter	A-WABU-S001	B
2000974	Lucky 5 Ranch (magnusson, Karl	A-WACL-SA02	B
2001167	Janzen Family Farms Inc.	A-WAMN-BA01	B
2001200	Campbell Farms	A-WACL-M003	B
2001408	Wiebe, Willard	A-WABU-S027	B
2001585	Drake, Don	A-WACL-BA03	B
2001641	Glenwood Farms	A-WABU-S025	B
2001666	Klaassen, K. John	A-WAHV-BA06	B
2001718	Busenitz, Eugene	A-WABU-S008	B
2001723	Willhite Farms	A-WABU-S028	B
2001730	Cedar Ridge Farms, Inc	A-WABU-S002	B
2001750	Ribordy, Jeff Robin	A-WABU-EA02	B
2001794	Nelson, Merle A. Billie J.	A-WABU-EA01	B
2001907	Shriver Ranch	A-WABU-BA11	B
2001908	O.K. Cattle Company	A-ARCL-BA04	B
2001912	Cedar Ridge Feedlot	A-WABU-B004	B
2002039	J.m.r. Cattle Co.	A-WABU-BA06	B
2002211	Henry Creek Farms, Inc.	A-WABU-S034	B
2002216	Mcclure Feedlot	A-WABU-BA04	B

Regulated Confined Animal Feeding Operations Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
2002256	Wiebe, Gordon A	A-WABU-S037	B
2002284	Golden Rule Farms Inc	A-WABU-S010	B
2002317	J-bar Farms Inc	A-WABU-C010	B
2002471	Klaassen Farms	A-WABU-BA14	B
2002508	Blair Ranch	A-WABU-BA09	B
2002576	Henry Creek Farms	A-WABU-H001	B
2002650	Rock Creek Ranch	A-WABU-C008	B
2002839	Mann's Atp Inc (clyde)	A-WABU-C007	B
2000028	J-bar Kennel	A-WABU-K001	C
2000056	Myers, Jack M.	A-WABU-SA01	C
2000059	Maddox, James W.	A-WABU-LA01	C
2000063	Sanders, Duane	A-WASG-LA01	C
2000064	Regier, Howard Otto	A-WABU-BA28	C
2000136	Anderson, Cap	A-WABU-SA03	C
2000189	Ray, Richard L.	A-WABU-LA02	C
2000206	Goertz, John Ruth	A-LAHV-BA13	C
2000219	Hiebert, Rudolf, Jr.	A-WAHV-BA09	C
2000221	Johnson, Steven R.	A-WABU-BA08	C
2000229	Williams, Neal	A-WAHV-BA03	C
2000326	Buller Farms	A-WAHV-BA02	C
2000457	Mcneill Farms	A-WABU-SA02	C
2000594	Mosiman, James Michelle	A-WAHV-BA07	C
2000689	Patterson Farm	A-ARSG-M019	C

Regulated Confined Animal Feeding Operations Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
2000782	Dougherty Farms	A-WABU-BA22	C
2000884	Regier, Dwight	A-WAHV-S002	C
2000903	Wiebe/harms Farms	A-WABU-BA21	C
2000904	Fagan, Dan	A-WABU-BA23	C
2000968	Entz, Eldon Tim	A-WABU-SA04	C
2000969	Regier, Charles	A-WAHV-S001	C
2000973	Wrampe, Ronald L.	A-WABU-SA05	C
2001000	Wolfs 29th St. Dairy	A-WABU-MA01	C
2001015	Williams, Clinton	A-WABU-BA25	C
2001056	Mcneil, Anthony And Penny	A-WABU-S036	C
2001105	Baker, William J.	A-WABU-BA12	C
2001128	Claassen, Alvin M.	A-WABU-BA24	C
2001149	Knust, Wade	A-WAMN-BA02	C
2001259	Wolf Dairy	A-WAMN-M002	C
2001278	Regier, Jerry	A-LAHV-S024	C
2001300	Cedar Hill Farms	A-LAHV-S016	C
2001316	Williams, Neal	A-WAHV-BA04	C
2001320	Jantzen, Leland	A-NEMN-BA20	C
2001386	Feeder Pig, Llc.	A-WABU-S005	C
2001446	Busenitz, Stefan	A-WABU-S042	C
2001540	Blackston, Guy L.	A-WABU-BA05	C
2001595	Wiebe, Ted	A-WABU-BA16	C
2001627	Meyersick Hog Feeders	A-WASG-S002	C

Regulated Confined Animal Feeding Operations Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
2001629	Spencer Hog Farm	A-WACL-S002	C
2001639	Busenitz, Arnold	A-WASG-SA01	C
2001657	Busenitz, Elwyn	A-WABU-S033	C
2001700	Promax, Inc.	A-WABU-S009	C
2001703	Hess, Jerome	A-WABU-S016	C
2001717	Claassen, Doug	A-WABU-S018	C
2001721	Voth, Arlo	A-WAHV-BA10	C
2001773	Entz, Wayne	A-WABU-BA29	C
2001780	Blackston, B.I.	A-WABU-BA07	C
2001840	Swanson Pork LLC	A-ARCL-S009	C
2001867	Wiebe, Duwayne	A-WABU-S026	C
2001918	Preheim, James	A-WAMN-BA05	C
2001933	Birdzell, Lloyd	A-WACL-BA06	C
2001953	Klingenberg, Vernon	A-WAMN-BA04	C
2001962	Thiel, Daryl Marcia	A-WACL-BA05	C
2001970	Fuller , Ray	A-WABU-BA17	C
2001992	Busenitz, Robert K	A-WABU-S040	C
2001999	Busenitz, Edwin	A-NEMN-S003	C
2002043	Thiel, Brian	A-WACL-BA04	C
2002132	Langenegger And Son	A-WABU-BA01	C
2002266	Busenitz Farms	A-WABU-S039	C
2002286	Harder Farms, Inc.	A-WABU-S035	C
2002325	Thiessen, Marlin	A-WABU-B003	C

Regulated Confined Animal Feeding Operations Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
2002395	Penner, Bruce	A-WABU-BA15	C
2002406	Busenitz, Doug Michelle	A-WAMN-S001	C
2002408	Penner, Leroy D.	A-WAMN-S002	C
2002440	Busenitz (Iester) Feedlot	A-WABU-BA13	C
2002480	Triple C Farm	A-WACL-H003	C
2002551	Triple T Livestock	A-WABU-H003	C
2002586	Four N, Inc.	A-LAHV-C002	C
2002657	Busenitz, Dwight	A-WABU-H002	C
2002710	2k Farms	A-WABU-C009	C
2002893	Circle E Feedlot	A-WABU-C002	C

Regulated Hazardous Waste Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
4000022	GE ENGINE SVCS INC STROTHER	KSD041917501	B
4000041	SHERWIN WILLIAMS CO	KSD056577810	C

Regulated Leaking Storage Tank Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
3000692	Town Country #15	06955	C

Regulated Identified Contaminated Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
7000130	REAVIS, FORREST	C200800031	B
7000131	TEXACO REFINERY, EL DORADO	C200800036	B
7000133	PESTER BURN POND SITE, OU #1(SOIL AND SLUDGE)	C200800058	B
7000137	DAVID LOVE SPRING	C200800461	B
7000138	COASTAL DERBY – BENTON (77TH ANDOVER)	C200800499	B
7000139	COASTAL DERBY – SMITH (77TH ANDOVER)	C200800500	B
7000140	LEON PWS WELL #4	C200800533	B
7000141	COASTAL DERBY REFINERY @ AUGUSTA	C200800535	B
7000143	GETTY GAS GATHERING – MERCURY	C200803026	B
7000144	FMGP – EL DORADO	C200870050	B
7000145	PESTER GROUNDWATER OU #2	C200870112	B
7000146	COASTAL REFINERY, EL DORADO	C200870243	B
7000148	VOICE STREAM WIRELESS TOWER SITE	C200870869	B
7000149	KANEB PIPELINE – EL DORADO	C200870978	B
7000150	KANEB – AUGUSTA	C200871334	B
7000154	HACKNEY GROUNDWATER CONTAMINATION PROBLEM	C201800038	B
7000155	NELSON'S MACHINE AND WELDING	C201800052	B
7000158	NORAM GAS TRANSMISSION (ARKLA ENERGY)	C201803027	B
7000159	CALES SITE	C201870013	B

Regulated Identified Contaminated Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
7000161	FMGP – WINFIELD	C201870047	B
7000218	CHEMICAL WASTE MANAGEMENT OF KANSAS	C208700054	B
7000129	ANDOVER DRUM SITE	C200800007	C
7000134	POTWIN PWS WELL #1 (HEFLIN WELL)	C200800059	C
7000135	SDS INCORPORATED	C200800063	C
7000136	VICKERS REFINERY POTWIN TANK FARM	C200800068	C
7000142	KANEB PIPELINE SPILL, ANDOVER	C200803021	C
7000147	ELBING USDA/CCC GRAIN BIN SITE	C200870557	C
7000157	KANEB PIPELINE GASOLINE – ARK CITY	C201800643	C
7000171	CORNER CLEANERS	C204070851	C
7000253	RAYTHEON AIRCRAFT CORP (MAIN SITE) (FORMER BEECH)	C208703012	C
7000254	RAYTHEON AIRCRAFT CORP (SALVAGE YARD SITE) (BEECH)	C208703013	C
7000256	CHASE GASOLINE SPILL, 69TH WEBB	C208703029	C
7000262	FURLEY COOP	C208770117	C
7000631	CHASE TRANS. CO. – EL DORADO	C200871564	C

Regulated Solid Waste Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
5000001	City of Augusta	–R	B

Regulated Solid Waste Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
5000042	Butler County	0100-S	B
5000185	Kansas Industrial Environmental Services, Inc.	0193-S	B
5000197	City of Augusta	0203-S	B
5000227	Skelly Oil Co.	0225-S	B
5000249	Mobil Oil Corp.	0246-S	B
5000335	Getty Refining and Marketing Co.	0327-S	B
5000360	Pester Refinery/El Dorado	0353-S	B
5000361	Phillip J. Brown	0354-S	B
5000401	City of El Dorado	0392-S	B
5000412	Lubrication Engineer, Inc.	0403-S	B
5000498	Texaco Refinery	0483-S	B
5000627	Williams Pipeline Company	0615-S	B
5000722	City of Andover	0701-S	B
5000749	City of El Dorado	0727-S	B
5000782	Butler County HHW	0756-S	B
5000795	Frontier El Dorado Refining Company	0769-S	B
5000801	City of Winfield	0774-S	B
5000828	Butler County	0799-S	B
5000129	Cowley County	0148-S	C
5000295	City of Atlanta	0284-S	C
5000342	City of Arkansas City	0334-S	C
5000834	Cowley County HHW	0805-S	C

Regulated Waste Water Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
6000012	COY BURGE OIL COMPANY	C-AR94-NO10	B
6000056	EL DORADO MOBILE ESTATES	C-WA09-NO02	B
6000093	HAMM – BURGSTROM #67	I-BB19-PO02	B
6000223	WINFIELD MUNICIPAL POWER PLANT	I-WA17-CO02	B
6000280	ANDOVER MWTP	M-WA01-OO01	B
6000281	LEON MWTP	M-WA11-OO01	B
6000282	STROTHER FIELD	M-WA17-IO03	B
6000283	WINFIELD CORRECTIONAL FACILITY	M-WA17-OO02	B
6000305	EL DORADO MOBILE ESTATES	C-WA09-OO03	B
6000504	ASSEMBLIES OF GOD-WHEAT STATE CAMP	C-WA03-NO01	B
6000508	SIMMONS SUBDIVISION	C-WA13-NO01	B
6000510	TRIPLE "D" MOBILE HOME PARK	C-WA22-TO01	B
6000538	GE ENGINE SERVICES – STROTHER	I-AR06-PO02	B
6000966	WILLIAMS PIPELINE COMPANY – AUGUSTA	I-WA03-PO01	B
6000968	MOBIL OIL CORP.-AUGUSTA REFINERY	I-WA03-PO03	B
6000969	COASTAL REFINING – BENTON	I-WA04-PO01	B
6000973	COASTAL REFINING – EL DORADO	I-WA09-PO01	B
6000974	COASTAL REFINING – EL DORADO	I-WA09-PO01	B
6000975	FRONTIER ELDORADO REFINING CO.	I-WA09-PO02	B
6000976	FRONTIER ELDORADO REFINING CO.	I-WA09-PO02	B
6000977	PESTER BURN POND REMEDIATION SITE	I-WA09-PO11	B

Regulated Waste Water Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
6000980	STROTHER FIELD AIRPORT/IND. PARK	I-WA17-PO01	B
6000981	WINFIELD MUNICIPAL POWER PLANT	I-WA17-PO02	B
6000984	KANEB PIPELINE OPERATING PARTNERSHIP	I-WA18-PO03	B
6001382	HARVEY CO. (EAST) PARK	M-LA13-NO04	B
6001384	HARVEY CO. (SOUTH)	M-LA13-NO05	B
6001956	WICHITA – FOUR MILE CREEK	M-WA01-OO02	B
6001957	ANDOVER	M-WA01-OO03	B
6001960	AUGUSTA MWTP	M-WA03-OO01	B
6001961	AUGUSTA MWTP	M-WA03-OO01	B
6001962	AUGUSTA MWTP (NEW FACILITY)	M-WA03-OO02	B
6001964	BURNS MWTP	M-WA05-NO01	B
6001970	EL DORADO MWTP	M-WA09-OO01	B
6001971	EL DORADO MWTP	M-WA09-OO01	B
6001972	EL DORADO MWTP	M-WA09-OO01	B
6001973	LATHAM MWTP	M-WA10-NO01	B
6001974	LEON	M-WA11-OO02	B
6001976	ROSE HILL MWTP	M-WA13-OO01	B
6001977	TOWANDA MWTP	M-WA14-OO01	B
6001978	UDALL MWWTP	M-WA15-OO01	B
6001979	WHITEWATER MWTP	M-WA16-OO01	B
6001980	WINFIELD CITY LAKE WWTF	M-WA17-NO02	B
6001982	WINFIELD MWTP	M-WA17-OO01	B
6001984	WINFIELD MWTP	M-WA17-OO01	B

Regulated Waste Water Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
6001988	WINFIELD MWTP	M-WA17-OO01	B
6001989	WINFIELD MWTP	M-WA17-OO01	B
6001990	WINFIELD MWTP	M-WA17-OO01	B
6001992	BUTLER CO. S.D. #17 (BEAUMONT)	M-WA23-OO01	B
6002038	GE ENGINE SERVICES, INC.	P-WA17-IO01	B
6002039	JOHN ZINK COMPANY L.L.C.	P-WA17-IO02	B
6002040	SELCOM USA	P-WA17-IO03	B
6002041	WEBSTER MFG.	P-WA17-OO01	B
6000061	KANEB PIPELINE	I-AR06-PO05	C
6000289	CONOCO PETROLEUM PIPELINE(PROPOSED)	I-AR94-PO44	C
6000320	WILLOW CREEK PARK	C-AR06-NO01	C
6000503	EAST GARDEN COURT	C-WA01-NO01	C
6000505	CAMP TA WA KO NI	C-WA03-NO03	C
6000506	KANSAS TURNPIKE TOWANDA SERVICE AREA	C-WA09-OO02	C
6000507	KISTLER SERVICE INC.	C-WA11-NO03	C
6000509	CIRCLE B MOBILE HOME PARK	C-WA20-NT01	C
6000589	ALLEN'S CONCRETE – PLANT #9	I-AR94-NP13	C
6000964	SHERWIN-WILLIAMS CO.	I-WA01-CO01	C
6000965	PARKS, INC.	I-WA03-NP02	C
6000967	MARTIN MARIETTA (21ST STREET)	I-WA03-PO02	C
6000970	HARSHMAN CONST. – SW BUTLER/GORDON	I-WA07-PO02	C
6000971	NORRIS GRAIN TRANSPORTATION INC.	I-WA09-NO04	C
6000972	KELLY MACLASKEY OILFIELD SERVICES, INC.	I-WA09-NP04	C

Regulated Waste Water Potential Site Sources

Source No.	Source Name	ID/Permit No.	Zone
6000978	LUBRICATION ENG.–POTWIN REF. TANK FAR	I-WA12-PO01	C
6000979	DUSTROL, INC.	I-WA14-NO01	C
6001381	HARVEY CO. (EAST) PARK	M-LA13-NO04	C
6001383	HARVEY CO. (EAST) PARK	M-LA13-NO04	C
6001392	FURLEY IMPROVEMENT DISTRICT	M-LA16-NO01	C
6001958	ANDOVER	M-WA01-OO03	C
6001959	ATLANTA	M-WA02-OO01	C
6001963	BENTON MWTP	M-WA04-OO01	C
6001966	DOUGLASS	M-WA07-OO02	C
6001967	ELBING MWTP	M-WA08-OO01	C
6001968	BUTLER CO. S.D. #08	M-WA09-ND08	C
6001969	USD #205 HAVERHILL SCHOOL	M-WA09-NO01	C
6001975	POTWIN MWTP	M-WA12-NO01	C
6001981	WINFIELD MWTP	M-WA17-OO01	C
6001983	WINFIELD MWTP	M-WA17-OO01	C
6001985	WINFIELD MWTP	M-WA17-OO01	C
6001986	WINFIELD MWTP	M-WA17-OO01	C
6001987	WINFIELD MWTP	M-WA17-OO01	C
6001993	KDOT. GREENWOOD CO. REST AREA (K-96)	M-WA23-OO02	C

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Added Sources:

The Added Sources section lists all the sites that have been added as potential sources of contamination by an evaluator through the assessment process to supplement the original data.

The potential sources listed in this section are sorted to show the added potential sources in Zone A first, Zone B second, and Zone C third.

Although a facility or business was added as a potential concern, it does not necessarily mean a release or spill has occurred. Contamination could only occur if certain chemical substances are released into the environment and filter into the water supply source.

Added Sources

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Added Potential Site Sources

Source No.	Source Name	SIC ID	Zone
9001436	grove of trees	0	B
9001430	Fuel, grain and feed and hay storage	10026	B
9001485	Fuel, grain, and feed and hay storage	10026	B
9001437	injection well	10048	B
9001335	cropland	115	B
9001339	Cropland	115	B
9001429	cropland	115	B
9001486	cropland	115	B
9001341	oil wells	1381	B
9001340	airport fuel storage and pesticide applicator	4582	B
9001334	airport industrial park	4582	C

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Potential Contaminants Summary:

The Contaminants Summary shows the number of identified unregulated sources in the assessment area for each contaminant of concern category.

In order to obtain the number of sources for each category, a relationship was correlated between each Standard Industrial Classification (SIC) and the contaminant of concern categories. Each SIC was assessed and associated with contaminant categories. For example, if not managed properly, a car wash (SIC 7542) could potentially contaminate an intake because of inorganic compounds (IOC) and volatile organic compounds (VOC); thus, a car wash is associated with IOCs and VOCs.

A chart displays a count for each contaminant category. The sum for each category represents the total number of identified sources that have been associated with that particular contaminant category. However, the total number of identified sources does not include contaminants from the Added Sources. In our example, a car wash would be considered 2 sources of contamination. It would be a potential source of contamination for IOCs and for VOCs; thus, 1 would be added to the total number of sources in the VOC category and 1 would be added to the IOC category.

Potential Contaminants Summary

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Number of Unregulated Site Sources Identified for each Contaminant Category

MicroBiological	Sedimentation	Pesticides	IOC's	SOC's	VOC's	E – P
152	138	16	361	116	213	119

A – Microbiological

B2 – Sedimentation

C* – Pesticides

B – Inorganic Compounds

C – Synthetic Organic Compounds

D – Volatile Organic Compounds

B1 – Eutrophication – Phosphorous

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Potential Contaminants Listing:

The Potential Contaminants section lists the contaminant of concern category associated with each Standard Industrial Classification (SIC) found in an assessment area. A complete list of contaminant category codes are located at the bottom of this page.

The relationships defined between the Standard Industrial Classifications (SIC) and the contaminant of concern categories are displayed in a table format. Using our car wash example, the relationships can be better illustrated. A car wash could release IOC and VOC chemical substances. The connection is shown by indicating the SIC, 7542, and the associated contaminant categories, IOC (Category B) and VOC (Category D). However, the contaminants listed are not associated with any Added Sources.

The list is sorted by the SIC source description and it only shows unique SIC sources. For example, an assessment area can have 20 car washes in an assessment area, but the list is only going to show contaminant categories associated with car washes onetime. This is because all car washes have the same SIC and every car wash poses the same potential threat to water intakes.

A – Microbiological **B** – Inorganic Compounds **B1** – Eutrophication – Phosphorous
B2 – Sedimentation **B*** – Nitrates **C** – Synthetic Organic Compounds
C* – Pesticides **D** – Volatile Organic Compounds

Potential Contaminants Listing

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Unregulated Identified Site Sources and associated Potential Contaminant Category

SIC ID	SIC Source	Potential Contaminant	Contaminant Category
3724	Aircraft Engines and Parts Manufacturing	inorganics, VOCs	B
"	"	"	D
3728	Aircraft Equipment Manufacturing	inorganics, VOCs	B
"	"	"	D
3721	Aircraft--manufacturing	inorganics, VOCs	B
"	"	"	D
2951	Asphalt Paving Mixtures And Blocks Manufacturing	inorganics, VOCs	B
"	"	"	D
7538	Auto Truck Repair Service	Inorganics, VOCs	B
"	"	"	D
2086	Bottled and Canned Soft Drinks Production	BOD	A
7542	Car Wash	Inorganics, VOCs	B
"	"	"	B1
"	"	"	B2
"	"	"	D
3672	Cathode Ray Television Picture Tubes Manufacturing	inorganics, VOCs	B
"	"	"	D

Unregulated Identified Site Sources and associated Potential Contaminant Category.

SIC ID	SIC Source	Potential Contaminant	Contaminant Category
211	Cattle Farm	Sanitary, Fertilizers TSS, pesticides, Erosion and sedimentation	A
"	"	"	B
"	"	"	B1
"	"	"	B2
"	"	"	B*
"	"	"	C*
1381	Drilling Oil and Gas Wells	Oil, Salt Water	B
"	"	"	C
3694	Engine Electrical Equipment Manufacturing	inorganics, VOCs	B
"	"	"	D
3499	Fabricated Metal Products Manufacturing	inorganics, VOCs	B
"	"	"	D
2041	Flour Mill and Other Food Grain Milling	BOD, TSS	A
"	"	"	B
5541	Gasoline Service Station	Inorganics, VOCs	B
"	"	"	D
7992	Golf Course	Fertilizers and pesticides	A
"	"	"	B1
"	"	"	B2

Unregulated Identified Site Sources and associated Potential Contaminant Category.

SIC ID	SIC Source	Potential Contaminant	Contaminant Category
7992	Golf Course	Fertilizers and pesticides	B*
"	"	"	C*
1611	Highway and Street Construction	Sedimentation	B2
2024	Ice Cream and Frozen Desserts Manufacturing	BOD oil and grease	A
3524	Lawn and Garden Equipment Manufacturing	inorganics, VOCs	B
"	"	"	D
4212	Local Trucking, without Storage	VOCs	D
3599	Machinery, Except Electrical Manufacturing	inorganics, VOCs	B
"	"	"	D
3999	Manufacturing Industries, nec	inorganics, VOCs	B
"	"	"	D
2515	Mattresses and Bedsprings Manufacturing	VOCs	D
2011	Meat Packing Plant Manufacturing	BOD, pathogens, Oil and grease	A
"	"	"	B*
3412	Metal Barrels, Drums, and Pails Manufacturing	inorganics, VOCs	B
"	"	"	D
3479	Metal Coating and Allied Services Manufacturing	inorganics, VOCs	B
"	"	"	D
2451	Mobile Home Manufacturing	TSS, VOCs	B

Unregulated Identified Site Sources and associated Potential Contaminant Category.

SIC ID	SIC Source	Potential Contaminant	Contaminant Category
2451	Mobile Home Manufacturing	TSS, VOCs	D
6515	Mobile Home Park	Sanitary wastes, Fertilizers	A
"	"	"	B
"	"	"	B1
"	"	"	B*
1542	Nonresidential Construction	Sedimentation	B2
1389	Oil and Gas Field services	Oil, Salt Water	B
"	"	"	C
2911	Petroleum Refining	inorganics, VOCs	B
"	"	"	D
7384	Photofinishing Laboratory	NA	B
"	"	"	D
4789	Pipeline Terminal	Inorganics, VOCs	B
"	"	"	D
3088	Plastics plumbing fixtures Manufacturing	inorganics, VOCs	B
"	"	"	D
3089	Plastics products Manufacturing	inorganics, VOCs	B
"	"	"	D
3471	Plating and Polishing Manufacturing	Inorganics, metals, VOCs and metal etch	B

Unregulated Identified Site Sources and associated Potential Contaminant Category.

SIC ID	SIC Source	Potential Contaminant	Contaminant Category
3471	Plating and Polishing Manufacturing	Inorganics, metals, VOCs and metal etch	D
2452	Prefabricated Wood Buildings Manufacturing	TSS	B
"	"	"	D
3743	Railroad Equipment Manufacturing	Inorganics, metals, VOCs	B
"	"	"	D
3273	Ready-mix Concrete Plant	Minerals and TSS	B
7033	Recreational Vehicle Parks and Campsites	sanitary, fertilizers, pesticides	A
"	"	"	B
"	"	"	B1
"	"	"	B*
"	"	"	C*
3585	Refrigeration and Heating Equipment Manufacturing	inorganics, VOCs	B
"	"	"	D
1429	Rock Quarry	Sedimentation	B2
5093	Scrap and Waste Materials	Metals, TSS	B
3444	Sheet Metal Work Manufacturing	Metals and TSS, VOCs and metal etch	B
3993	Signs and Advertising Display Manufacturing	inorganics, VOCs	B
"	"	"	D
1521	Single-family Housing Construction	Oil, Paint, Pesticides, Fertilizers	A

Unregulated Identified Site Sources and associated Potential Contaminant Category.

SIC ID	SIC Source	Potential Contaminant	Contaminant Category
1521	Single-family Housing Construction	Oil, Paint, Pesticides, Fertilizers	B1
"	"	"	B2
"	"	"	B*
"	"	"	C
3841	Surgical and Medical Instruments Manufacturing	inorganics, VOCs	B
"	"	"	D
7532	Top, Body, and Upholstery Repair Shops and Paint Shops	Inorganics, VOCs	B
"	"	"	D
3792	Travel trailers and Campers Manufacturing	inorganics, VOCs	B
"	"	"	D
742	Veterinary Services, Specialties	Sanitary, Inorganics TSS	A
"	"	"	B
2434	Wood Kitchen Cabinets Manufacturing	TSS, VOCs	B
"	"	"	D
752	Animal Specialty Services	Sanitary, fertilizers	A
"	"	"	B
"	"	"	B1
"	"	"	B2
"	"	"	B*

Unregulated Identified Site Sources and associated Potential Contaminant Category.

SIC ID	SIC Source	Potential Contaminant	Contaminant Category
2759	Commercial Printing NEC	Inorganics, VOCs, Semi volatiles	B
"	"	"	C
"	"	"	D
2752	Commercial Printing–Lithographic	Inorganics, VOCs, Semi volatiles	B
"	"	"	C
"	"	"	D
241	Dairy Farms	Sanitary, fertilizers	A
"	"	"	B
"	"	"	B1
"	"	"	B2
"	"	"	B*
3523	Farm Machinery and Equipment	inorganics	B
"	"	"	D
4221	Farm Product Warehousing and Storage	TSS, VOCs	B
"	"	"	D
5083	Farm and Garden Machinery	inorganics	B
191	General Farm, Primarily Crop	fertilizers, Pesticides	B
"	"	"	B1
"	"	"	B2

Unregulated Identified Site Sources and associated Potential Contaminant Category.

SIC ID	SIC Source	Potential Contaminant	Contaminant Category
191	General Farm, Primarily Crop	fertilizers, Pesticides	B*
"	"	"	C*
2711	Newspapers Publishing and Printing	Inorganics, VOCs, Semi volatiles	B
"	"	"	C
"	"	"	D
2048	Prepared Feeds For Animals and Fowls	Sanitary, Nitrates, phosphorous and pesticides	A
"	"	"	B
"	"	"	B1
"	"	"	B2
"	"	"	B*
"	"	"	C*
7948	Racing, Including Track Operation		NA
5012	Recreational vehicle sales and repair	Inorganics	B
5561	Recreational vehicle sales and repair	Inorganics	B
4953	Refuse Systems	ALL	A
"	"	"	B
"	"	"	B1
"	"	"	B2
"	"	"	B*

Unregulated Identified Site Sources and associated Potential Contaminant Category.

SIC ID	SIC Source	Potential Contaminant	Contaminant Category
4953	Refuse Systems	ALL	C
"	"	"	C*
"	"	"	D
7699	Repair Services, Nec	inorganics	B

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Protection Measures:

The Protection Measures section shows water quality protection measures for the Standard Industrial Classifications (SIC) identified in the assessment area.

Previous sections of this report are designed to show areas that Public Water Supplies (PWS) can focus on to improve the susceptibility of an assessment area. This section helps identify water quality protection measures that a PWS can use as guidance for implementing action for a potential contaminant site in the assessment area. It focuses on protection measures that can reduce the risk of contamination to the water supply.

This portion of the report only displays water quality protection measures for each type of SIC found in the assessment area. It does not display protection measures for each site in the assessment area because every SIC should have the same or similar water quality protection management practices. However, the protection measures listed are not associated with any Added Sources.

Protection Measures

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Recommended Water Quality Protection Measures

SIC	SIC Source	Contaminant Source	Water Quality Protection Measure	Regulatory Authority
3724	Aircraft Engines and Parts Manufacturing	inorganics, VOCs	Manage wastes properly and treat process wastewater prior to discharge to a POTW or direct	40 CFR 464 and State or federal Storm water pollution prevention regulations
3728	Aircraft Equipment Manufacturing	inorganics, VOCs	Manage wastes properly and treat process wastewater prior to discharge to a POTW or direct	40 CFR 464 and State or federal Storm water pollution prevention regulations
3721	Aircraft—manufacturing	inorganics, VOCs	Manage wastes properly and treat process wastewater prior to discharge to a POTW or direct	40 CFR 464 and State or federal Storm water pollution prevention regulations
2951	Asphalt Paving Mixtures And Blocks Manufacturing	inorganics, VOCs	Collect and pre-treat wastewater. Control storm water runoff. Minimize ground contamination with petroleum or other products. Control storm water runoff to minimize TSS transport	40 CFR 443 and State or federal Storm water pollution prevention regulations
7538	Auto Truck Repair Service	Inorganics, VOCs	Discharge to POTW. Manage oil products and used oil so that it is not in contact with water	40 CFR 442 and
2086	Bottled and Canned Soft Drinks Production	BOD	Wastewater pretreatment and/or discharge to a POTW.	40 CFR 407 and State or federal Storm water pollution

				prevention regulations
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Recommended Water Quality Protection Measures

SIC	SIC Source	Contaminant Source	Water Quality Protection Measure	Regulatory Authority
7542	Car Wash	Inorganics, VOCs	Install and maintain sediment and grease traps where appropriate	40 CFR 442
3672	Cathode Ray Television Picture Tubes Manufacturing	inorganics, VOCs	Manage wastes properly and treat process wastewater prior to discharge to a POTW or direct	40 CFR 469 and State or federal Storm water pollution prevention regulations
211	Cattle Farm	Sanitary, Fertilizers TSS, pesticides, Erosion and sedimentation	Proper application of fertilizers and pesticides. Proper cleaning of equipment and disposal of chemicals. Maintain riparian areas along waterways and keep cattle out of these areas. Proper Waste Management and Grazing Management.	KDHE– Livestock Waste Management Section, KAR 28–16, KDA, County Soil Conservation District, NRCS
1381	Drilling Oil and Gas Wells	Oil, Salt Water	Drill water retention and treatment	KAR 28–41, 45, 40 CFR 435
3694	Engine Electrical Equipment Manufacturing	inorganics, VOCs	Manage wastes properly and treat process wastewater prior to discharge to a POTW or direct	40 CFR 469 and State or federal Storm water pollution prevention regulations
3499	Fabricated Metal Products Manufacturing	inorganics, VOCs	Manage wastes properly and treat process wastewater prior to discharge to a POTW or direct	State or federal Storm water pollution prevention regulations

Recommended Water Quality Protection Measures

SIC	SIC Source	Contaminant Source	Water Quality Protection Measure	Regulatory Authority
2041	Flour Mill and Other Food Grain Milling	BOD, TSS	Wastewater pretreatment and/or discharge to a POTW	40 CFR 122 and State or federal Storm water pollution prevention regulations
5541	Gasoline Service Station	Inorganics, VOCs	Maintain area to minimize fuel contamination	NA
7992	Golf Course	Fertilizers and pesticides	Proper application of fertilizers and pesticides. Proper cleaning of equipment and disposal of chemicals.	KDHE, KAR 28-16
1611	Highway and Street Construction	Sedimentation	Erosion and Sediment Control	KAR 28-16, KDHE
2024	Ice Cream and Frozen Desserts Manufacturing	BOD oil and grease	Wastewater pretreatment and/or discharge to a POTW	40 CFR 405 State or federal Storm water pollution prevention regulations
3524	Lawn and Garden Equipment Manufacturing	inorganics, VOCs	Manage wastes properly and treat process wastewater prior to discharge to a POTW or direct	State or federal Storm water pollution prevention regulations

Recommended Water Quality Protection Measures

SIC	SIC Source	Contaminant Source	Water Quality Protection Measure	Regulatory Authority
4212	Local Trucking, without Storage	VOCs	Discharge to a POTW	State or federal Storm water pollution prevention regulations
3599	Machinery, Except Electrical Manufacturing	inorganics, VOCs	Manage wastes properly and treat process wastewater prior to discharge to a POTW or direct	State or federal Storm water pollution prevention regulations
3999	Manufacturing Industries, nec	inorganics, VOCs	Manage wastes properly and treat process wastewater prior to discharge to a POTW or direct	State or federal Storm water pollution prevention regulations
2515	Mattresses and Bedsprings Manufacturing	VOCs	Discharge of process waters to POTW.	State or federal Storm water pollution prevention regulations
2011	Meat Packing Plant Manufacturing	BOD, pathogens, Oil and grease	Wastewater pretreatment and/or discharge to a POTW	40CFR 432 and State or federal Storm water pollution prevention regulations
3412	Metal Barrels, Drums, and Pails Manufacturing	inorganics, VOCs	Minimize outdoor storage and control storm water runoff. Pre-treat process wastewater prior to discharge to POTW	40 CFR 464 and State or federal Storm water pollution prevention regulations

Recommended Water Quality Protection Measures

SIC	SIC Source	Contaminant Source	Water Quality Protection Measure	Regulatory Authority
3479	Metal Coating and Allied Services Manufacturing	inorganics, VOCs	Manage wastes properly and treat process wastewater prior to discharge to a POTW or direct	40 CFR 433 and State or federal Storm water pollution prevention regulations
2451	Mobile Home Manufacturing	TSS, VOCs	Discharge of process waters to POTW. Minimize outdoor storage.	State or federal Storm water pollution prevention regulations
6515	Mobile Home Park	Sanitary wastes, Fertilizers	Discharge to POTW. Minimize use of lawn chemicals	KAR 28–5
1542	Nonresidential Construction	Sedimentation	Erosion and Sediment Control	KAR 28–16, KDHE
1389	Oil and Gas Field services	Oil, Salt Water	Proper management of production wastes	KAR 28–41, 45, 40 CFR 435
2911	Petroleum Refining	inorganics, VOCs	Collect and pre-treat wastewater. Control storm water runoff. Minimize ground contamination with petroleum or other products	40 CFR 419 and State or federal Storm water pollution prevention regulations

Recommended Water Quality Protection Measures

SIC	SIC Source	Contaminant Source	Water Quality Protection Measure	Regulatory Authority
7384	Photofinishing Laboratory	NA	Discharge to POTW. Recycle chemicals	CFR 40 459
4789	Pipeline Terminal	Inorganics, VOCs	Maintain secondary containment for fuel storage and fueling areas. Maintain and inspect. Effect repairs promptly	NA
3088	Plastics plumbing fixtures Manufacturing	inorganics, VOCs	Pre-treat wastewater prior to discharge. Minimize outdoor storage and control storm water runoff.	40 CFR 463 and State or federal Storm water pollution prevention regulations
3089	Plastics products Manufacturing	inorganics, VOCs	Pre-treat wastewater prior to discharge. Minimize outdoor storage and control storm water runoff.	40 CFR 463 and State or federal Storm water pollution prevention regulations
3471	Plating and Polishing Manufacturing	Inorganics, metals, VOCs and metal etch	Minimize outdoor storage and control storm water runoff. Pre-treat process wastewater prior to discharge to POTW	40 CFR 413 and State or federal Storm water pollution prevention regulations
2452	Prefabricated Wood Buildings Manufacturing	TSS	Discharge of process waters to POTW. Minimize outdoor storage.	State or federal Storm water pollution prevention regulations

Recommended Water Quality Protection Measures

SIC	SIC Source	Contaminant Source	Water Quality Protection Measure	Regulatory Authority
3743	Railroad Equipment Manufacturing	Inorganics, metals, VOCs	Manage wastes properly and treat process wastewater prior to discharge to a POTW or direct	40 CFR 464 and State or federal Storm water pollution prevention regulations
3273	Ready-mix Concrete Plant	Minerals and TSS	Minimize outdoor storage and control storm water runoff.	State or federal Storm water pollution prevention regulations
7033	Recreational Vehicle Parks and Campsites	sanitary, fertilizers, pesticides	Discharge to POTW. Minimize use of lawn chemicals	NA
3585	Refrigeration and Heating Equipment Manufacturing	inorganics, VOCs	Manage wastes properly and treat process wastewater prior to discharge to a POTW or direct	State or federal Storm water pollution prevention regulations
1429	Rock Quarry	Sedimentation	Erosion and Sediment Control	KAR 28-16
5093	Scrap and Waste Materials	Metals, TSS	Minimize contact with storm water	State or federal Storm water pollution prevention regulations

Recommended Water Quality Protection Measures

SIC	SIC Source	Contaminant Source	Water Quality Protection Measure	Regulatory Authority
3444	Sheet Metal Work Manufacturing	Metals and TSS, VOCs and metal etch	Minimize outdoor storage and control storm water runoff. Pre-treat process wastewater prior to discharge to POTW	40 CFR 464 and State or federal Storm water pollution prevention regulations
3993	Signs and Advertising Display Manufacturing	inorganics, VOCs	Manage wastes properly and treat process wastewater prior to discharge to a POTW or direct	40 CFR 459 and State or federal Storm water pollution prevention regulations
1521	Single-family Housing Construction	Oil, Paint, Pesticides, Fertilizers	Proper cleaning and disposal of household hazardous waste. Proper storage, application, and clean up of pesticides and fertilizers	KAR 28–48, KDHE, KDEM
7032	Sporting and Recreational Camps	sanitary, fertilizers, pesticides	Discharge to POTW. Minimize use of lawn chemicals	KAR 28–5
3841	Surgical and Medical Instruments Manufacturing	inorganics, VOCs	Manage wastes properly and treat process wastewater prior to discharge to a POTW or direct	State or federal Storm water pollution prevention regulations
7532	Top, Body, and Upholstery Repair Shops and Paint Shops	Inorganics, VOCs	Discharge to POTW. Recycle where appropriate. Properly maintain oil product and waste. Manage paint and solvent wastes properly	NA

Recommended Water Quality Protection Measures

SIC	SIC Source	Contaminant Source	Water Quality Protection Measure	Regulatory Authority
3792	Travel trailers and Campers Manufacturing	inorganics, VOCs	Manage wastes properly and treat process wastewater prior to discharge to a POTW or direct	State or federal Storm water pollution prevention regulations
742	Veterinary Services, Specialties	Sanitary, Inorganics TSS	Discharge to POT	NA
2434	Wood Kitchen Cabinets Manufacturing	TSS, VOCs	Discharge of process waters to POTW. Minimize outdoor storage.	State or federal Storm water pollution prevention regulations
752	Animal Specialty Services	Sanitary, fertilizers	Collect and treat wastes.	NA
2759	Commercial Printing NEC	Inorganics, VOCs, Semi volatiles	Recycle chemicals where possible. Discharge to POTW	40 CFR 459 and State or federal Storm water pollution prevention regulations
2752	Commercial Printing–Lithographic	Inorganics, VOCs, Semi volatiles	Recycle chemicals where possible. Discharge to POTW	40 CFR 459 and State or federal Storm water pollution prevention regulations

Recommended Water Quality Protection Measures

SIC	SIC Source	Contaminant Source	Water Quality Protection Measure	Regulatory Authority
241	Dairy Farms	Sanitary, fertilizers	Collect and treat process wastes. Use good erosion control practices. Minimize storm water contact with contaminants.	40 CFR 405
3523	Farm Machinery and Equipment	inorganics	Discharge to POTW	State or federal Storm water pollution prevention regulations
4221	Farm Product Warehousing and Storage	TSS, VOCs	Keep the area clean of grain. Use grease traps.	State or federal Storm water pollution prevention regulations
5083	Farm and Garden Machinery	inorganics	Discharge to POTW	NA
191	General Farm, Primarily Crop	fertilizers, Pesticides	Maintain good erosion control practices and minimize the use of chemicals	NA
2711	Newspapers Publishing and Printing	Inorganics, VOCs, Semi volatiles	Recycle chemicals where possible. Discharge to POTW	40 CFR 459 and State or federal Storm water pollution prevention regulations

Recommended Water Quality Protection Measures

SIC	SIC Source	Contaminant Source	Water Quality Protection Measure	Regulatory Authority
2048	Prepared Feeds For Animals and Fowls	Sanitary, Nitrates, phosphorous and pesticides	Maintain animal feeding areas and feed storage areas to minimize contact with storm water. Collect and treat process wastes.	40 CFR 412 and State or federal Storm water pollution prevention regulations
7948	Racing, Including Track Operation	NA	Discharge to POTW. Minimize use of lawn chemicals. Use good erosion control practices	NA
5012	Recreational vehicle sales and repair	Inorganics	Discharge to a POTW. Store oils and lubricants properly	NA
5561	Recreational vehicle sales and repair	Inorganics	Discharge to a POTW. Store oils and lubricants properly	Discharge to a POTW. Store oils and lubricants properly
4953	Refuse Systems	ALL	Store wastes properly in order to minimize contact with storm water.	Maintain the lagoon or storage vessel properly. Control storm water run on and runoff to minimize contamination of storm water
7699	Repair Services, Nec	inorganics	Discharge to POTW	NA

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Assessment Analysis:

The Assessment Analysis section displays the numbers assigned to each contaminant of concern category for each question in the susceptibility analysis.

This analysis is based on a decision tree framework consisting of a series of yes/no questions. These questions consider the proximity of contaminant sources to the water supply intake, the type of contaminant, and the application of pollution prevention or water quality protection practices to sources of contamination. As the evaluator moves through the analytical framework, susceptibility points are accumulated based on the presence of contaminant sources in the assessment area.

After all the questions have been answered, the SLS is calculated for each contaminant of concern category. The SLS is determined by counting the number of contamination risk factors found to occur in the delineated assessment area and applying a multiplier to this number. Because the number of contaminant category risk factors is not equal, the multiplier is used to establish a common scale for the SLS of each contaminant category.

Assessment Analysis

Public Water Supply: **ARKANSAS CITY, CITY OF**
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Surface Water Single Well Analysis

A – Microbiological **B** – Inorganic Compounds

B1 – Eutrophication – Phosphorous

B2 – Sedimentation **C** – Synthetic Organic Compounds

C* – Pesticides **D** – Volatile Organic Compounds

No.	Question	Response	A	B	B1	B2	C	C*	D
1	Is the intake located at a treatment plant?	No	1	1	0	0	1	1	1
2	Is there an open channel conveyance from the intake to the treatment plant?	No	0	0	0	0	0	0	0
3	Does a PWS own or control the conveyance right-of-way?	Yes	0	0	0	0	0	0	0
4	Does a PWS own or control the area within 1/4 mile of intake?	No	1	1	0	0	1	1	1
5	Is the area within 1/4 mile of the intake entirely native grass?	No	1	1	0	0	1	1	1
6	Is transportation infrastructure in close proximity to the intake?	Yes	0	1	0	0	1	1	1
7	Are there water quality protection plans for the transportation infrastructure?	No	0	1	0	0	1	1	1
8	Are any commercial, industrial, or urban areas present?	Yes	1	1	0	0	1	1	1
9	Does each industrial/commercial site and urban area have a water quality protection plan in place?	No	1	1	0	0	1	1	1
10	Is riparian area vegetated?	Yes	0	0	0	0	0	0	0
11	Has riparian area been farmed up to the stream/riverbank?	Yes	0	0	0	0	0	1	0
12	Is there a lack of native grass or trees?	No	0	0	0	0	0	1	0
13	Is livestock use present in riparian area?	Yes	1	0	0	0	0	1	0
14	Are any confined livestock production sites in riparian area?	No	0	0	0	0	0	0	0
15	Is each confinement area registered with KDHE?	Yes	0	0	0	0	0	0	0
16	Are any row crops (corn, milo, soybean) present?	Yes	0	0	0	0	0	1	0
17	Are water quality protection plans in use for each cropland?	No	0	0	0	0	0	1	1

No.	Question	Response	A	B	B1	B2	C	C*	D
18	Are any orchards present?	No	0	0	0	0	0	0	0
19	Are water quality protection plans in use for each orchard?	Yes	0	0	0	0	0	0	0
20	Is the intake a river intake?	Yes	1	1	0	1	1	1	1
21	Is the intake at a city-owned lake?	No	1	1	1	1	1	1	1
22	Is there water quality monitoring conducted at the river or lake?	Yes	0	0	0	0	0	0	0
23	Is TMDL needed for any of the rivers or lakes?	Yes	1	1	1	1	1	1	1
24	Are TMDL pollutants of concern reported by monitoring?	Yes	0	0	0	0	0	0	0
25	Are any point source discharges within 16 miles upstream of intake?	Yes	1	1	1	1	1	0	1
26	Is pretreatment required at any of the point sources?	Yes	1	1	1	1	1	0	1
27	Are all riparian buffers vegetated?	Yes	0	0	0	0	0	0	0
28	Are vegetated riparian buffer and a water quality protection plans in place?	No	1	1	1	1	0	1	0
29	Is there urbanized land within riparian buffer?	No	0	0	0	0	0	0	0
30	Is a NPDES stormwater permit required for the urbanized areas?	No	1	1	1	1	1	1	1
31	Are voluntary water quality protection plans in place for each urbanized area?	Yes	0	0	0	0	0	0	0
32	Is there industrial land use within riparian buffer?	No	0	0	0	0	0	0	0
33	Is NPDES stormwater permit required for industrial areas?	No	1	1	1	1	1	1	1
34	Are voluntary water quality protection plans in place for each industrial area?	Yes	0	0	0	0	0	0	0
35	Are there livestock present?	Yes	1	0	1	0	0	1	0
36	Is there livestock confinement present?	Yes	1	0	1	0	0	1	0
37	Is each confined livestock facility registered with KDHE?	No	1	0	1	0	0	1	0
38	Are any row crops (corn, milo, soybeans) present?	Yes	0	0	1	1	0	1	0
39	Are water quality protection plans in use for each row crop production?	No	0	0	1	1	0	1	0
40	Are any orchards present?	No	0	0	0	0	0	0	0
41	Are water quality protection plans in use for each orchard?	Yes	0	0	0	0	0	0	0
42	Is there any small grain (wheat, oats, barley) production?	Yes	0	0	1	1	0	1	0
43	Are water quality protection plans in use for each small grain production?	No	0	0	1	1	0	1	0
44	Are there unsewered developments (concentrations of lagoons or septic systems) present in Zone B?	Yes	1	1	0	0	0	0	0
45	Is a general watershed water quality protection plan in use?	No	1	1	1	1	1	1	1
46	Are any point source discharges within 16 miles upstream of intake?	Yes	0	0	0	0	0	0	0
47	Is pretreatment required at any of the point sources?	Yes	1	1	1	1	1	0	1

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Site Comments:

The Site Comments section lists all the comments that were added for the potential sources of contamination found in the assessment area.

Local comments and feedback from people that are familiar with the assessment area is an important aspect of the assessment. The comments greatly improve the assessment by adding detail to the sites that can be referenced for more information.

This local information may include comments on potential contamination threats (or lack there of), local water quality protection initiatives, etc. Adding comments are optional and are mainly focused on sources in areas that could have the greatest impact on water supply if a spill or release occurred in the environment. It is left to the discretion of the PWS and/or source water assessment committee to add comments.

Site Comments

Public Water Supply: **ARKANSAS CITY, CITY OF**
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Comments for Unregulated Sites

Did Not Receive Any Comments

Comments for Regulated Confined Animal Feeding Operations Sites

Potential Contaminant Site Name	Site No.	Site Comments	Author
Birdzell, Lloyd	2001933	This cattle livestock facility has no water quality protection plans.	Nicole Fisher
Southern Kansas Pork Producers Buying Station	2000598	This swine facility has no groundwater monitoring.	Nicole Fisher

Comments for Regulated Hazardous Waste Sites

Did Not Receive Any Comments

Comments for Regulated Leaking Storage Tank Sites

Did Not Receive Any Comments

Comments for Regulated Identified Contaminated Sites

Potential Contaminant Site Name	Site No.	Site Comments	Author
HACKNEY GROUNDWATER CONTAMINATION PROBLEM	7000154	Private water wells and groundwater are contaminated with nitrates and carbon tetrachloride from former storage facilities. For more information contact Maura O'Halloran (785) 296-0268	Nicole Fisher
LEON PWS WELL #4	7000140	The public water well #4 has been contaminated with nitrates from a local agricultural company. The well was plugged in 1988.	Nicole Fisher

Comments for Regulated Solid Waste Sites

Did Not Receive Any Comments

Comments for Regulated Waste Water Sites

Potential Contaminant Site Name	Site No.	Site Comments	Author
BURNS MWTP	6001964	This facility uses nondischarging lagoons.	Nicole Fisher

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Added Site Comments:

The Added Site Comments section lists the comments for why sites were added as a potential source of contamination found to the assessment area.

Added Site Comments

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Comments for Added Contaminant Sites

Added Contaminant Site Name	Site No.	Site Comments	Author
Cropland	9001339	This site could contaminate the public water supply.	Nicole Fisher
Fuel, grain and feed and hay storage	9001430	This site could contaminate the public water supply.	Nicole Fisher
Fuel, grain, and feed and hay storage	9001485	This site could contaminate the public water supply.	Nicole Fisher
airport fuel storage and pesticide applicator	9001340	This site could contaminate the public water supply.	Nicole Fisher
airport industrial park	9001334	This site could contaminate the public water supply.	Nicole Fisher
cropland	9001335	This site could contaminate the public water supply.	Nicole Fisher
cropland	9001429	This site could contaminate the public water supply.	Nicole Fisher
cropland	9001486	This site could contaminate the public water supply.	Nicole Fisher
grove of trees	9001436	This is an important buffer to prevent contamination into the public water supply.	Nicole Fisher
injection well	9001437	This site could contaminate the public water supply.	Nicole Fisher

Comments for Added Contaminant Sites

Added Contaminant Site Name	Site No.	Site Comments	Author
oil wells	9001341	This site could contaminate the public water supply.	Nicole Fisher

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Analysis Question Comments:

The Analysis Question Comments section lists all the comments that were added during analysis portion of the assessment, in which a series of yes/no questions were asked.

Evaluators have the option to add comments to questions to clarify why a response was given or to give more details to a question. Local comments and feedback from people that are familiar with the assessment area is an important aspect of the assessment. The comments greatly improve the assessment by adding clarification and details that could not be identified with a simple yes or no response.

Analysis Question Comments

Public Water Supply: ARKANSAS CITY, CITY OF
Assessment Area: 479

Comments for Analysis Questions

Analysis Question	Question Comments	Author
Does each industrial/commercial site and urban area have a water quality protection plan in place?	Unknown	Clay Randel
Has riparian area been farmed up to the stream/riverbank?	Unknown	Clay Randel